

RA
413.7
.A4
I58
1988
App.B
Ch.3

CHAPTER 3

S/HMO FINANCIAL PERFORMANCE

by

Charlene Harrington, Ph.D.
Associate Professor

Robert J. Newcomer, Ph.D.
Associate Professor

Institute for Health & Aging
University of California, San Francisco 94143

and

Alan Friedlob
Health Care Financing Administration

September 1987

The research for this study was supported by the Health Care
Financing Administration (Contract No. HCFA 85-034/CP)

ACKNOWLEDGEMENTS

The authors wish to acknowledge the contributions made to the preparation of this chapter by the following individuals: Thomas G. Moore, Leslie A. Grant, Harold S. Luft, Ida VSW Red and Norton S. Twite.

CONTENTS

	<u>Page</u>
Acknowledgements.....	ii
Contents.....	iii
List of Tables.....	iv
Introduction.,.....	1
Methodology.....	1
Background.....	2
Impact on Financial Performance.....	2
Net Gains and Losses.....	3
Risk-Sharing Arrangements.....	5
Service Utilization and Expenditures.....	8
Acute Care Hospitals.....	8
Ambulatory Care.....	15
Chronic and Expanded Care.....	18
Administrative Expenditures.....	22
Differences in Expenditure Patterns and Total Expenditures.....	24
Financial Management Issues.....	25
Revenue Sources.....	27
Medicare Payments.....	29
Premiums.....	29
Copayments.....	31
Medicaid Payments.....	31
Financial Effects of the S/HMO Projects on the Sponsors.....	35
Discussion.....	37
Summary Findings.....	39
Notes.....	42
Bibliography.....	46

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 S/HMO Net Gain or Loss for 1985 and 1986.....	4
2 Risk Sharing Arrangements for Years 1 and 2 by S/HMO Site.....	7
3 Hospital Days Per 1,000 Members Per Year at S/HMO Sites Compared to Average Medicare Beneficiary Hospital Days Per 1,000 Aged 65 and Over.....	9
4 Hospital Length of Stay and Admissions Per 1,000 Members Per Year at S/HMO Sites Compared to Average Medicare Beneficiary Hospital Length of Stay and Admissions Per 1,000 Aged 65 and Over.....	10
5 Medicare Hospital Utilization for S/HMOs and Federally Qualified HMOs for 1986.....	12
6 Average Provider Rates by S/HMO for 1985 and 1986.....	13
7 Expenditures Per Member Per Month (PMPM) for Selected Services at S/HMO Sites for 1985 and 1986.....	14
8 Utilization of Selected Ambulatory and Chronic Care Services Across S/HMO Sites Per 1,000 Members Per Year	16
9 Comparison of Ambulatory Care and Skilled Nursing Care Utilization By S/HMOs and Selected Federally Qualified HMOs for 1986.....	17
10 Administration Expenses as a Percentage of Total Expenses for S/HMOs and Selected Federally Qualified HMOs, 1986.....	23
11 S/HMO Expenditures for 1985 and 1986.....	26
12 S/HMO Revenues for 1985 and 1986.....	28
13 Private Premium Rates for S/HMOs (For non-Medicaid Members).....	30
14 State Medicaid S/HMO Reimbursement Rates.....	32
Attachment A — Expenditures Across S/HMO Sites for 1985 and 1986.....	48
Attachment B — Kaiser Permanente Health Plan of the Northwest ACR Calculation of (in Dollars) Medicare Plus II Dues Rates.....	49

INTRODUCTION

This chapter examines the financial performance of the S/HMOs during the initial phase of the demonstration when the S/HMOs were not fully at financial risk. The intent was to identify factors that seem to contribute to the initial planning and operation of financially successful S/HMOs. Success in this demonstration was defined as providing access for members to appropriate services of high quality, while at the same time controlling utilization and expenditures to ensure the financial viability of the organization.

Although the findings of this study were based on observations of only four S/HMO organizations during the initial start-up period, a number of general conclusions were drawn. The findings indicated the importance of the sponsor having a clear strategic plan and a vision of how the S/HMO model fit with the organization's design for the future. S/HMO operational success further depended on its efficient integration into a financially viable risk-based health maintenance organization (HMO).

This chapter describes the effects of the organizational, management, and provider arrangements on the financial performance of the S/HMO's including: total gains and losses, S/HMO risk arrangements, service utilization and expenditures, and revenues. Four areas of expenditures are examined: hospital inpatient, ambulatory care, chronic care, and administrative services. Revenue sources -- Medicare, premiums, copayments, and Medicaid -- are also examined. The overall effects of these financial outcomes on the viability of the S/HMO organizations are discussed.

METHODOLOGY

This chapter covers the first 30 months of project operation from January 1985 through June 1987. Much of the statistical data presented, however, only covers the first 24 months of operational experience because data beyond that period were not available at the time the report was completed.

Qualitative data were collected through interviews with S/HMO officials at each demonstration. These officials included: S/HMO executive directors and key administrative staff, S/HMO marketing directors, selected S/HMO board members, and former S/HMO staff. The interviews were conducted in person three times between January and December 1986, and once by telephone in spring 1987. Interviews focused on key organizational factors known to be related to the success of prepaid health plans (Lamb and Associates, 1980; Lewin and Associates, 1986; Slabosky, 1981). Correspondence, contracts, board minutes, reports by the sites, audit reports, and other documents were also collected and analyzed. Particular emphasis was placed on examining how corporate organization, management, and provider arrangements influenced S/HMO financial performance. A third factor contributing to project success -- marketing and enrollments -- was addressed in Chapter 2.

Quantitative data were collected from the S/HMO sites regarding measures

of S/HMO performance (i.e., acute and chronic care service use, revenues, and expenses). Unaudited quarterly and special reports submitted by the demonstrations to the Health Care Financing Administration were the primary source of aggregate statistics on utilization and financial data. The utilization and expenditure data were subject to many later adjustments by the sites through November 1987. Further adjustments are expected after audits are completed and audit settlements are made with the Health Care Financing Administration (HCFA).

BACKGROUND

The S/HMO demonstrations are new organizational entities formed by existing organizations. In establishing the demonstration sites, Brandeis University and HCFA agreed to test the S/HMO model in four different market environments. The S/HMO organizational models were developed by two types of sponsors:

- o Two established HMOs: a successful, established health maintenance organization (HMO) (i.e., Kaiser Northwest) in Portland, Oregon; and a partnership between a mature HMO and an experienced direct long term care service provider (i.e., Group Health, Inc. and Ebenezer Society); in Minneapolis-St. Paul, Minnesota.
- o Two types of long term care agencies: Metropolitan Jewish Geriatric Center, Inc., a direct services provider in Brooklyn, New York and SCAN, a long term care service broker in partnership with a large medical center in Long Beach, California.

The S/HMO demonstration tested certain basic organizational and financing features. First, a full range of acute and chronic care services were to be provided through a single organizational structure. Second, the consolidation of services with a coordinated case management system was expected to allow the organizations to improve access to and appropriateness of services delivered. Third, the S/HMOs were to serve a cross-section of the elderly population including the functionally impaired and unimpaired elderly. Fourth, the S/HMOs were financed on a prepaid capitation basis by pooled funds from Medicare, Medicaid, and member premiums. Finally, the S/HMOs were to share the initial financial risks and eventually were expected to assume full financial risk for service costs at the end of the first 30 months of the demonstration.

IMPACT ON FINANCIAL PERFORMANCE

In the early 1980s, following only a few basic principles increased the probability of success for a prepaid health plan. One of these principles was to employ effectively utilization review or reimbursement incentives to control hospital utilization and keep it 20 to 30 percent below fee-for-service levels. In the increasingly competitive markets of the late 1980s, controlling hospital use was still necessary to successful financial performance of a prepaid health plan, but it is no longer sufficient for

assuring success. Success must include controlling ambulatory care, administrative and other costs as well as ensuring an adequate number of members. The S/HMOs had the added requirement of controlling their chronic and expanded care utilization and expenditures.

A review of data drawn from unaudited S/HMO quarterly reports submitted to HCFA revealed the relationship between the S/HMO organizational characteristics and output measures of performance (i.e., utilization and expenditures). Two findings emerged from this review. All S/HMOs were able to contain hospital use at or below their own budget projections and at levels below the average levels provided to fee-for-service Medicare beneficiaries in their communities. All the S/HMOs were also able to control their chronic, expanded care, and case management costs within their budgeted levels, although there were substantial differences in expenditures across sites.

All the S/HMO demonstration sites, however, lost substantially more than they expected to lose during their first 24 months of operation. At three sites, these losses were primarily attributable to high start-up and administrative costs, coupled with much lower than projected enrollments (i.e., considerably less revenue). At Medicare Plus II, the losses were on the Medicare covered services and not on chronic care services where a savings was achieved. Plan losses were not directly related to implementing the S/HMO concept (i.e. providing case-managed chronic care services to functionally impaired seniors under prepaid health care arrangements).

Under demonstration protocols, plan losses were mitigated by risk sharing arrangements among the demonstrations, the Health Care Financing Administration (HCFA), and state Medicaid programs. In the absence of such arrangements, which covered costs associated with providing acute and chronic care services as well as administrative expenses beyond preestablished levels, it is probable that at least two of the demonstrations would have ceased operations (Elderplan and SCAN Health Plan). To test the S/HMO concept at two of the four demonstration sites, HCFA underwrote the start-up costs and initial operating deficits for two organizations that established new HMOs as well as for S/HMOs demonstration activities.

NET GAINS AND LOSSES

Table 1 shows the net gains and losses for each of the S/HMOs for 1985 and 1986. Seniors Plus experienced losses of over \$1.5 million during its first two years of operations. Elderplan experienced the greatest losses, \$2 million in 1985 and \$3.4 million in 1986. SHP losses were slightly greater than \$1.5 million in 1985 and \$1.2 million in 1986. Medicare Plus II experienced a net gain during 1985 and 1986 of \$654,840 for its chronic and expanded care services (those additional S/HMO benefits), but experienced an overall loss of \$854,182 during the period because of the \$1.4 million in losses on its Medicare covered services. All of the statistics are subject to final financial and audit adjustments.[1]

Seniors Plus attributed its losses primarily to high marketing and

Table 1

S/IMO NET GAIN OR LOSS FOR 1985 AND 1986

	Elderplan		Medicare Plus II[a]		SCAN Health Plan (SHP)		Seniors Plus[b]	
	1985	1986	1985	1986	1985	1986	1985	1986
Total Member Months	5,310	19,640	20,085	47,825	6,704	19,827	2,859	15,719
Total Revenue PMPM	307.54	291.58	255.11	273.34	334.45	351.68	237.70	224.84
(Total Revenue)	(\$1,633,024)	(\$5,726,551)	(\$5,123,953)	(\$13,072,459)	(\$2,242,159)	(\$5,972,727)	(\$679,571)	(\$3,534,260)
Total Expenditures PMPM	683.96	464.38	267.23	286.11	550.95	413.44	420.87	286.82
(Total Expenditures Plus Reserves)	(\$3,631,846)	(\$9,120,503)	(\$5,367,315)	(\$13,683,211)	(\$3,693,592)	(\$8,197,206)	(\$1,203,272)	(\$4,508,478)
Total Gain or Loss PMPM	-376.43	-172.81	-12.12	-12.77	-216.50	-61.76	-183.18	-61.98
Net Gain or Loss	(\$-1,998,822)	(\$-3,393,952)	(\$-243,430)	(\$-610,752)	(\$-1,451,433)	(\$-1,224,479)	(\$-523,701)	(\$-974,218)

Source: S/IMO Demonstration Projects. Quarterly Reports, 1985, 1986. These are unaudited data and subject to later adjustments.

[a] The total amount of savings from the chronic care component of Medicare Plus II was \$654,840 for 1985 and 1986. These funds were placed in a benefit stabilization fund for later use by the project. The actual expenditures for the Medicare covered benefits including acute and ambulatory care was the ACR. However, the AAPCC was lower than expected, resulting in a loss of \$1.4 million. The savings from the chronic care did not offset the losses. The overall loss was \$854,182 for 1985 and 1986.

[b] Seniors Plus data may not be complete because of accounting procedures.

administrative expenditures and low enrollment. Seniors Plus utilization and expenditures for services were generally low and within its target range. Elderplan also attributed its initial losses primarily to high administrative and marketing costs. Elderplan also had high hospital and other service expenditure costs. Elderplan enrollment was substantially lower than expected for the period, especially its Medicaid enrollment, so that its expenditures were higher than planned. SHP experienced losses of slightly over \$2.7 million, which were also related to enrollments that were substantially lower than expected. Service expenditures as well as administrative and marketing costs were also high at SHP.

As Medicare Plus II had planned, its actual experience was one of saving money on long term care services during the first 22 months (1985 and 1986) — with a total savings of \$654,840. Initially a benefit stabilization fund (BSF), setting aside \$.20 ppm, had been planned, but was not established. When savings were realized at the end of 1986, Kaiser Permanente (KP) Northwest requested and received approval from HCFA to establish the fund. Medicare Plus II did not plan to place any funds into the BSF during 1987, but agreed that any surplus remaining in the BSF at the end of the demonstration would be used to offset the health plan dues for S/HMO members remaining in the program at that time. The losses on the Medicare covered services including the acute, ambulatory care, and other represented the difference between the KP Northwest ACR (see Attachment B) and its expenditures.

Losses at the three S/HMO projects during the first 18 months were not unexpected. The projects, however, had hoped the losses would be more limited than they turned out to be. A 1981 study on the investments of 73 HMOs reported that an average investment of \$2.1 million was needed before an HMO would break even financially (Goran, 1981). This report noted that the staff model needed the highest average investment (\$3.3 million) to break even, whereas the network model needed the smallest amount (\$1 million) (Goran, 1981). This report was consistent with results from the staff model at Elderplan, which showed higher losses than SHP with its IPA model. Taking into account inflation rates between 1981 and 1986, the initial S/HMO losses were not too different from the experience of earlier HMOs. The S/HMOs may, of course, experience additional losses in 1987 and later time periods.

RISK-SHARING ARRANGEMENTS

The S/HMO project was designed so that HCFA assumed the major share of financial risk during the first 30 months of the demonstration. Two Medicaid agencies were also willing to share partial risk for the projects in their states. This arrangement paid for losses over and above the financial risk assumed by each S/HMO project. The initial S/HMO risk sharing was low, with a graduated amount during the second phase of the demonstration. The total S/HMO risk ranged from \$425,000-\$700,000 for the first 30 months of the project, depending upon the initial risk proposal made by each S/HMO. After the initial 30 months, each S/HMO was expected to assume the full financial risk.

Table 2 shows the actual risk-sharing arrangements across sites. Kaiser Medicare Plus II developed a unique S/HMO risk-sharing model. Kaiser was fully at risk for all acute and ambulatory care and other Medicare-covered services from the beginning of the project. HCFA was fully at financial risk during the first 18 months of the project for all chronic care services not covered by Medicare, and Kaiser was fully at risk for the remaining 4 months out of a total of 22 months. Thus, HCFA was at risk for 18/22 and Kaiser for 4/22 of the total losses.

The initial Seniors Plus risk-sharing arrangement limited risk to a fixed amount for the first 30 months of the demonstration (see Table 2).[2] The initial risk was shared by HCFA and the Minnesota Medicaid program, based on their estimated proportion of the total costs (63.5% for HCFA, 1.5% for the state Medicaid program and 35% for Seniors Plus for the initial loss corridor.)[3] Beyond that level, Medicare and Medicaid shared any remaining losses according to their portion of total third-party revenues produced, and the state Medicaid also paid for a portion of the total costs for Medicaid recipients with high costs.

The risk-sharing arrangement established by Elderplan was for a maximum of \$150,000 for plan losses in the first 18 months and \$500,000 in the second 12 months. HCFA assumed 53 percent and the city/state Medicaid program assumed 18 percent of the first \$517,241 in losses. Beyond that level, Medicare and Medicaid shared the additional losses on an 80.2-19.8 percent ratio, based on the estimated portion of the total third-party revenues each was expected to produce.[4] The city and state of New York estimated that 20 percent of the area's aged population would be eligible to join but later found that less than 12 percent of the aged population were Medicaid eligibles. No other state (and city) Medicaid program participating in the demonstration project assumed as great a financial risk during the first two project periods as in New York.

New York Medicaid was impatient about Elderplan's failure to enroll Medicaid recipients because according to the risk-sharing agreement between HCFA and the state, New York was paying 19.8 percent of the total risk-sharing amount. For the first four quarters, this amounted to a loss by the state of \$353,981 for only half as many Medicaid enrollees (10%) as were projected. Because New York was paying more than it considered its share of the losses, it requested that HCFA renegotiate the risk-sharing agreement for 1986-87. HCFA did not agree to a renegotiation, arguing that a renegotiation would send a signal to Elderplan that it need not be concerned about meeting its Medicaid enrollment goals, and might be detrimental to the enrollment of Medicaid members.

SHP assumed a \$200,000 financial risk for the first year (18 months) and \$225,000 during the second year of operation. The California Medicaid contract covered the costs for each Medicaid enrollee beyond a total of \$15,000 during the first year. Since no individual SHP Medicaid enrollee had actual costs beyond \$15,000, the California Medicaid program assumed no actual financial loss for SHP during the first two years of the project.[5]

Table 2

RISK SHARING ARRANGEMENTS FOR YEARS 1 AND 2 BY S/HMO SITE

	Elderplan[a]		Medicare Plus II[b]		SCAN Health Plan (SNP)[c]		Seniors Plus[d]	
	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Site	\$150,000	\$500,000	4/22 of chronic care losses	Full risk	\$200,000	\$225,000	Total costs up to \$250,000	Total costs up to \$500,000
HCFA	53.1% up to \$520,833; 80.2% thereafter	53.1% up to \$1,736,111; 80.2% thereafter	18/22 of chronic care losses	0	paid all losses beyond \$200,000	paid all losses beyond \$225,000	shared losses proportionate to total costs	shared losses proportionate to total costs
State Medicaid	18.1% up to \$520,833 in losses; 19.8% thereafter	18.1% up to \$1,736,111 in losses; 19.8% thereafter	0	0	[c]	[c]	shared total costs	shared total costs

Source: S/HMO program HCFA contracts. The first project year was 18 months (January 1985-August 1986) and the second project year was 12 months (August 1986-August 1987).

- [a] The first corridor Medicaid loss was \$94,270 and the second corridor Medicaid loss was \$259,710 with an estimated loss of \$300,000 in the last six months for a total of \$653,980. Medicare paid 53.1% of the first \$520,833 in losses and Medicaid paid 18.1%. In the second corridor of losses, Medicare paid 80.2% and Medicaid paid 19.8%.
- [b] HCFA agreed to be fully at risk for the first year (18 months) and Kaiser agreed to be fully at risk for 4 months out of the 22-month first year. The HCFA risk was only for the long term care services.
- [c] SCAN paid for all losses up to \$25,000 in 1985 and 1986. Beyond that level, Medicare paid all losses. Medicaid paid for losses beyond \$15,000 for any individual Medicaid member during Year 1 but had no risk sharing during Year 2.
- [d] Each S/HMO partner was liable for one-half of the financial risk for the site for each year. Each group was liable for its proportion of the costs to the total program budget for the first risk corridor (\$1,059,322). Beyond that level, HCFA and the state shared all losses proportionate to their share of total revenues.

HCFA assumed the total financial risk beyond SHP's initial risk.

Because the initial risks of the S/HMOs were limited, the sites reached their maximum financial liability soon after the projects began. Elderplan reached its maximum loss of \$150,000 within the first quarter and had a loss of \$3.5 million for the initial 18-month period. SHP reached its maximum loss within the second quarter and had a loss of \$2.2 million for the 18 months. Even Seniors Plus, with more modest losses, reached its maximum loss by the sixth quarter with an overall loss of \$1.25 million for the 18 months. After the S/HMOs reached the maximum of their financial liability, there was little incentive to control costs for the period, especially marketing and initial start-up costs that were not expected to continue later in the demonstration. The S/HMOs made becoming fully operational early in the demonstration a priority because they would be fully at risk in a short time.

SERVICE UTILIZATION AND EXPENDITURES

For purposes of comparing costs, service utilization and expenditures have been grouped into three major categories: acute care, ambulatory care, and chronic care and expanded services. Each project's goals for utilization and expenditures are discussed in relationship to actual outcomes. The total expenditures were a function of utilization (types and amounts of services) and reimbursement rates. Differences in service expenditures across sites were substantial. Variations in S/HMO member disability levels could account for some of the differences in utilization rates and costs per member, but a detailed analysis of the specific such effects was beyond the scope of this chapter. Actual data for Kaiser Medicare Plus II were available only for chronic care expenditures, while acute and ambulatory care data were estimated.

Acute Care Hospitals

Utilization. Hospital utilization patterns during the first 24 months are shown on Tables 3 and 4. Hospital days of care (Table 3) are a function of the number of admissions times the length of stay (Table 4). These patterns for each S/HMO are compared with overall Medicare hospital utilization patterns, which vary substantially by geographical region. Brooklyn had higher rates and Minneapolis/St. Paul showed the lowest rates.

On the whole, S/HMO aggregate hospital utilization, as measured by both days of care and admissions, was lower than the average rates for Medicare enrollees who received care on a fee-for-service basis. These data, not adjusted for differences in age, gender, and health status, show that Elderplan and SHP had lower hospital days per 1000 member years than average Medicare fee-for-service hospital days in their areas (54% and 31% lower, respectively). As new HMOs, both Elderplan and SHP expected lower utilization than fee-for-service but higher utilization than Seniors Plus and Medicare Plus II. Elderplan had targeted 2,700 days/1,000 and SCAN, 2,000 days/1,000; both were below their targeted levels in 1985. Both had more difficulty meeting their targets during the second year, having a 36 percent and 16

Table 3

HOSPITAL DAYS PER 1000 MEMBERS PER YEAR AT S/HMO SITES COMPARED
TO AVERAGE MEDICARE BENEFICIARY HOSPITAL DAYS PER 1000 AGED 65 AND OVER

	Days of Care per 1000 Members/Year 1985	Days of Care per 1000 Members/Year 1986	Average Annual Medicare Day of Care Per 1000 Aged 65+ 1984[a]
Elderplan	1860	2533	3667
Medicare Plus II	1538	1675	3185
SCAN Health Plan (SHP)	1883	2178	2685
Seniors Plus	1271	1423	2581

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986; Unpublished data from S/HMO Demonstrations; Unpublished data from HCFA (25-52-84) Cost Reporting Forms.

[a] For Elderplan, Medicare days of care are for Kings County; for Kaiser, the statistics are for Multnomah County; for SCAN, they are for Los Angeles County; for Seniors Plus they are for Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Wasington Counties. Days of care were standardized by the number of aged 65 and over within each geograph area.

Table 4

HOSPITAL LENGTH OF STAY AND ADMISSIONS PER 1,000 MEMBERS PER YEAR
AT S/HMO SITES COMPARED TO AVERAGE MEDICARE BENEFICIARY HOSPITAL
LENGTH OF STAY AND ADMISSIONS PER 1000 AGED 65 AND OVER

	Average Length of Stay 1985	Average Length of Stay 1986	Average Medicare Length of Stay 1984	Admissions per 1000 Members/Year 1985	Admissions per 1000 Members/Year 1986	Average Annual Medicare Admissions/ 1000 Aged 65+ 1984[a]
Elderplan	7.9	10.2	13.7	235	249	267
Medicare Plus II	6.0	5.6	6.7	256	298	478
SCAN Health Plan (SHP)	5.9	6.7	8.0	317	323	334
Seniors Plus	5.1	5.3	7.6	235	227	339

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986; Unpublished data from S/HMO Demonstrations;
Unpublished data from HCFA (25-2-84) Cost Reporting Forms.

[a] Medicare admissions were standardized by the number of aged 65 and over within each geographic area. For Elderplan, Medicare admissions are for Kings County; for Kaiser, they are for Multnomah County; for SCAN, they are for Los Angeles County; for Seniors Plus, they are for Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington Counties.

percent increase, respectively, in days of care between 1985 and 1986.

The two S/HMOs associated with experienced HMOs (Seniors Plus and Medicare Plus II) were generally able to keep hospital utilization (days of care and admissions) at their targeted levels. Their length of stay and admission were lower than the average fee-for-service rates for their areas and substantially lower than the other two S/HMOs.

Medicare Plus II and Seniors Plus also showed an increase in both days of care and admissions between the first and second years. Kaiser Permanente had a 9 percent increase in hospital days of care between 1985 and 1986 and Seniors Plus had a 12 percent increase. Seniors Plus had the lowest hospital utilization of all the S/HMOs, in terms of days of care, length of stay, and admission rates (Tables 3 and 4).

Table 5 shows a hospital utilization comparison of the four S/HMOs with other TEFRA HMOs in their respective areas in 1986. SHP had the highest admission rate in relation to all other HMOs and its competitors in the Los Angeles area, but it had a short length of stay, like other HMOs. The data on Table 5 show that the HMOs with individual practice associations (IPAs) models (HMO Minnesota and PHP) generally had higher hospital days per 1,000 than other HMOs within their area. SCAN with its IPA model also expected to and did have higher hospital utilization rates (days of care and admissions rates) within its area. New HMOs would be expected to have higher utilization than established HMOs and those with large numbers of elderly who had been in HMOs prior to age 65.

Medicare Plus II and Seniors Plus showed the lowest lengths of stay among the S/HMOs and selected TEFRA HMOs. Seniors Plus also had the lowest annualized hospital days among the S/HMOs and TEFRA HMOs. In general, the two S/HMOs sponsored by established HMOs (Kaiser and Group Health) with experienced HMO physician providers were better able to control hospital admissions and days of care than the two S/HMOs with newly formed physician provider groups.

Expenditures. Hospital expenditures are a function of reimbursement rates as well as utilization. Table 6 shows the estimated average reimbursement rates reported by hospitals for the four S/HMOs. The hospital rates per day were similar across sites in 1985. The rates paid by SHP increased by 22 percent in 1986 but its utilization rates were lowered. Therefore, expenditures for SHP in 1986 were held virtually constant, despite the large per diem rate increase.

Table 7 shows the hospital expenditures per member per month (pmpm) for each of the S/HMOs for 1985 and 1986 (see Attachment A for detailed data). Medicare Plus II had the highest hospital expenditures of \$122.51 pmpm, based on its ACR estimates (Attachment B). Its hospital costs may be higher because some administrative costs are included in its estimates, since KP's utilization rates were generally low[6] and its per day charges did not appear to explain its expenditures.

Table 5
MEDICARE HOSPITAL UTILIZATION
FOR S/HMOs AND FEDERALLY QUALIFIED HMOs FOR 1986

	Annualized Patient Days per 1,000 Medicare Members	Annualized Hospital Admissions per 1,000 Medicare Members	Medicare Average Length of Stay
<u>Brooklyn</u>			
Elderplan[a]	2,533	249	10.2
<u>Los Angeles</u>			
SCAN Health Plan (SHP)	2,178	323	6.7
FHP	1,435	211	6.8
United	1,550	194	8.0
PacifiCare	1,483	-	-
<u>Minneapolis/St. Paul</u>			
Seniors Plus	1,423	227	6.3
Group Health Seniors	1,171	219	5.3
Share	1,321	220	6.0
HMO Minnesota	2,027	294	6.9
FHP	1,804	273	6.6
Med Centers	1,501	250	6.0
<u>Portland</u>			
Medicare Plus II	1,675	298	5.6
Medicare Plus (Kaiser-TEFRA)	1,558	263	5.9

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986;
Unpublished data for Federally Qualified HMOs, Office of Prepaid
Health Care, Health Care Financing Administration, 1987.

[a] No operational TEFRA HMO in Brooklyn in 1986.

Table 6

PROVIDER RATES BY S/HMO FOR 1985 AND 1986

	Elderplan		Medicare Plus II		SCAN Health Plan		Seniors Plus	
	1985	1986	1985	1986	1985	1986	1985	1986
Hospital[a]	\$446.00	\$504.00	NA	\$711.00	\$595.00	\$725.00	\$492.00	\$526.00
SNP	165.00	165.00	96.00	85.00- 105.00	210.00	210.00	114.00	110.00
ICF	68.00	68.00	40.00- 85.00	40.50- 109.00	65.00	65.00	51.00- 74.00	49.00- 76.00
Homemaker	6.50	6.50	5.00- 13.50	6.00- 13.50	8.50	8.50	8.50	8.50
Personal Care	13.25	13.25	6.00- 14.00	6.00- 14.00	9.75	9.75	14.80	14.50
Respite Aide	NA	NA	NA	NA	8.50	8.50	6.00	6.00
Adult Day Health	NA	NA	18.00	15.00- 35.00	42.50	42.50	27.00	27.00- 32.00
Transportation Trips (one-way ambulette)	15.00	15.00	5.00- 38.00	5.00- 16.20	25.00	25.00	35.00	26.00
Skilled Nursing	53.23	53.23	15.00- 75.00	10.00- 75.00	34.22	34.22	45.00	50.00
PT, OT	43.00	43.00	75.00	75.00	30.50-	30.50-	45.00	50.00
Protective Services	NA	NA	NA	NA	NA	NA	NA	22.00

Source: S/HMO unpublished data, 1985 and 1986.

[a] Rate excluded emergency and ancillary care services, except for SNP in 1986.

Table 7

EXPENDITURES PER MEMBER PER MONTH (PMPM) FOR SELECTED SERVICES AT S/HMO SITES FOR 1985 AND 1986
(Percentage of total cost in parentheses)

	Elderplan		Medicare Plus II		SCAN Health Plan		Seniors Plus[h]	
	1985	1986	1985	1986	1985	1986	1985	1986
Total Member Months	5,310	19,640	20,085	47,824	6,704	19,827	2,880	7,719
<u>Provider Expenditures</u>								
Hospital PM/PM[c]	\$ 82.02 (12.1)	\$107.37 (23.4)	107.25 (40.1)	122.51 (42.8)	\$102.56 (19.7)	\$104.68 (26.8)	\$60.39 (14.3)	\$71.26 (24.8)
Ambulatory Encounters[d]	111.18 (16.4)	88.16 (19.2)	90.43 (33.8)	87.85 (30.7)	72.00[d] (13.8)	79.10 (20.2)	88.27[d] (21.0)	71.53[d] (24.9)
Medicare Nursing Home ppm[e]	8.48 (1.3)	7.11 (1.5)	5.02 (1.9)	5.71 (2.0)	12.16 (2.3)	22.79 (5.8)	6.80 (1.6)	3.16 (1.1)
Medicare Home Health ppm[e]	4.97 (0.7)	4.39 (1.0)	9.66 (3.6)	10.37 (3.6)	2.15 (0.4)	3.35 (0.9)	4.55 (1.1)	3.58 (1.2)
Other Medicare ppm[f]	6.90 (1.0)	5.78 (2.0)	3.13 (1.2)	3.45 (1.2)	3.68 (0.7)	3.24 (0.8)	5.18 (1.2)	4.97 (1.7)
Chronic Care ppm[g]	25.48 (3.8)	32.27 (7.0)	21.04 (7.9)	21.04 (7.4)	32.87 (6.3)	30.09 (7.7)	40.01 (9.5)	29.70 (10.4)
Expanded Care ppm[h]	30.91 (4.6)	40.89 (8.4)	19.61 (7.3)	20.46 (7.2)	30.89 (5.9)	34.19 (8.7)	19.56 (4.4)	21.28 (7.4)
Care Management Staff PM/PM[i]	23.91 (3.5)	9.92 (2.2)	4.50 (1.7)	4.50 (1.6)	22.20 (4.3)	15.37 (3.9)	33.27 (9.3)	9.17 (3.2)
<u>Administrative Expenditures</u>								
Marketing ppm	114.40 (16.9)	52.99 (11.5)	1.78 (.7)	1.78 (.6)	112.55 (21.6)	38.69 (9.9)	65.12 (15.5)	40.19 (14.0)
Administration ppm[j]	198.55 (29.4)	81.51 (17.8)	4.81 (1.8)	8.44 (2.9)	91.28 (17.5)	39.57 (10.1)	70.72 (16.8)	25.01 (8.7)
Capital & Other Costs ppm[k]	69.37 (10.3)	28.50 (6.2)	NA	NA	39.26 (7.5)	20.10 (5.1)	21.99 (5.2)	6.95 (2.4)
Total Cost ppm[l]	676.18 (100.0)	458.87 (100.0)	267.23 (100.0)	286.11 (100.0)	521.59 (100.0)	391.17 (100.0)	420.87 (100.0)	286.82 (100.0)

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986. These data are unaudited and subject to later adjustments. Seniors Plus was reported on a cash basis, Elderplan and SCAN Health Plan were on an accrual basis, while Kaiser hospital, ambulatory care and other Medicare costs were estimates rather than actual expenditures.

- [a] Kaiser reported ACR costs for services other than chronic care.
 [b] Figures for Seniors Plus are based on the claims paid through the end of the year. Actual expenditures may be higher than these figures reflect since not all claims for a given quarter are filed or paid during that quarter.
 [c] Hospital expenditures include in-area emergency and out-of-area services. For Seniors Plus and Kaiser Permanente, outside referrals were included in this figure.
 [d] Includes medical referrals and ambulatory encounters. (For Seniors Plus, referrals were not included with ambulatory encounter expenditures.) SHP physicians received an additional \$8 ppm in 1985 from the risk reserves not shown in the above figures.
 [e] Includes Medicare only.
 [f] Durable medical equipment.
 [g] Includes non-Medicare SNF/ICF, non-Medicare home-health, in-home services, and day care services. For Medicare Plus II, the average audited costs are shown for both years. Included in the \$21.04 are the estimated direct service claims of 1985 (\$7.24) and 1986 (\$16.14), plus addition chronic care costs.
 [h] Includes dental, prescription drugs, vision, hearing aids, medical transportation, and emergency medical response system.
 [i] Average audited costs are shown for Medicare Plus II. These costs reached \$6.75 ppm by the end of 1986 for Medicare Plus II.
 [j] Includes all administrative costs including salaries and benefits. For Kaiser Permanente, beginning in 1986, health plan administration was identified as a separate component of the ACR and included in the administration ppm costs. Capital costs are not segregated. The Medicare Plus II administrative costs reported were only those for chronic care and not for the total plan in 1985.
 [k] Includes interest, depreciation, amortized start-up and rent for administrative and staff offices.
 [l] Excludes risk reserves.

In 1986, Elderplan and SHP had similarly high hospital costs (over \$100 pm/pm) and Seniors Plus had the lowest hospital costs (\$71 pm/pm). Since Seniors Plus hospital admission and per diem rates were similar to those of the other S/HMOs (except SHP), its lower hospital expenditures per member were primarily related to shorter lengths of stay. Thus, the ability of Seniors Plus to control days of care and length of stay represented an important factor in its having lower costs than the other sites.

Elderplan and SHP had higher hospital expenditures than Seniors Plus, but for different reasons. While hospital admission rates were about the same at Elderplan and Seniors Plus, Elderplan had longer lengths of stay and 178 percent more hospital days of care per 1,000 enrollees than Seniors Plus in 1986. SHP had considerably higher hospital admission rates and higher payment rates per day than either Seniors Plus or Elderplan in 1986. SHP's hospital utilization and reimbursement rates were a function of its hospital contract and the risk-sharing arrangements discussed in Chapter 2.

Hospital utilization and reimbursement rates increased in all the S/HMOs between 1985 and 1986. Consequently, hospital expenditures also increased at each site except at SHP which only had a slight increase. Elderplan showing the greatest resulting increase in hospital expenditures (31 percent) for the period. Overall hospital expenses represented a high proportion of total S/HMO budget, ranging from 23-27 percent of the totals except at Kaiser Permanente where hospital expenditures were 43% of its total budget in 1986. Controlling hospital expenditures was a necessary condition to the financial success of the S/HMOs.

Ambulatory Care

Table 8 shows data on ambulatory care medical encounters which aggregates all physician, physician specialist, and other professional services as a group. These data showed that the two S/HMOs sponsored by HMOs (Seniors Plus and Medicare Plus II) had substantially lower encounter rates (8,754 and 10,267) per 1,000 members per year than the other two projects. These differences were expected because of the problems in establishing new physician HMO groups and because both Elderplan and SHP reported having little control over specialty physician referrals. It was not surprising that in 1986 Elderplan and SHP had rates 74 and 33 percent higher, respectively, than Seniors Plus. Both Elderplan and SHP were able to reduce ambulatory care utilization in 1986, when SHP's rates were similar to Medicare Plus II but still higher than Seniors Plus.

Table 9 shows the comparison of ambulatory care encounters of the S/HMOs with selected TEFFRA HMOs. These data show that Elderplan and SHP were higher than all others. Seniors Plus had a low rate of encounters compared with the other S/HMOs but was the second highest among the TEFFRA HMOs in its area.

Ambulatory care expenditures ranged between 19 to 31 percent of total expenditures for the S/HMOs in 1986. The S/HMOs reported the following

Table 3

UTILIZATION OF SELECTED AMBULATORY AND CHRONIC CARE SERVICES
ACROSS S/HMO SITES PER 1,000 MEMBERS PER YEAR
(in parentheses are the actual total units of service during that year)

	Elderplan		Medicare Plus II		SCAN Health Plan		Seniors Plus	
	1985	1986	1985	1986	1985	1986	1985	1986
	5,310	19,640	20,085	47,825	6,704	19,827	2,859	15,719
SNF/ICF Days	17,333 (7,670)	15,262 (24,978)	10,286 (17,217)[b]	10,267 (40,919)[b]	16,151 (9,023)	11,674 (19,289)	8,970 (2,137)	8,754 (11,467)
Home Health Visits [d]	199 (88)	445 (728)	448 (750)[c]	557 (2,219)[c]	550 (307)	1,246 (1,939)	478 (114)	337 (442)
Durable Medical Equipment (Pieces)	479 (212)	1,077 (1,763)	1,438 (2,407)[e]	1,037 (4,134)[f]	217 (121)	67 (110)	1,234 (294)	851 (1,115)
Chronic Care Utilization	-	-	-	-	-	-	348 (83)	421 (551)
Chronic Care SNF/ICF Days	199 (88)	835 (1,366)	609 (1,019)	1,398 (5,571)	1,487 (831)	1,834 (3,031)	2,195 (523)	1,231 (1,612)
Chronic Care Home Health Visits [d]	273 (121)[h]	78 (128)[h,i]	- NA	98 (392)	177 (99)	26 (43)	541 (129)	311 (408)
Chronic Care Respite, Homemaker, Home Aide and Chore Hours	40,165 (17,773)	21,154 (34,622)[h]	4,151 (6,947)	11,316 (30,119)[j]	15,386 (6,322)	17,310 (25,421)	8,026 (4,124)	10,513 (10,513)
Day Care Center Days	151[k] (67)[l]	224[k] (366)[l]	137 (230)	187 (747)	254 (142)	649 (1,073)	2,518 (600)	820 (1,074)
Other Expanded Care Utilization								
Dental Office Visits	443 (196)	257 (420)	- NA	- NA	- NA	- NA	1,780 (424)	1,134 (1,485)
Outpatient Prescriptions	15,060 (6,664)	18,172 (29,742)	13,912 (23,286)	15,660 (62,412)	19,434 (10,857)	20,686 (34,179)	- NA	- NA
Optometry and Audiology Visits	1,191 (527)	645 (1,056)	- NA	- NA	7 (4)	21 (34)	2,019 (481)	1,703 (2,231)
Glasses, Hearing Aids, and Durable Medical Equipment (Pieces)	585 (259)	297 (486)	609 (1,020)	408 (1,627)	809 (452)	686 (1,133)	458 (109)	298 (390)
Emergency Response System (Months)	41 (18)	24 (39)	- NA	- NA	20 (11)	33 (55)	71 (17)	53 (69)
Medical Transportation (Round Trips)	2,235 (989)[1]	2,162 (3539)[1]	39 (66)	75 (298)	109 (61)	571 (943)	865 (206)	737 (966)

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986. Note: these are unaudited data. Not all claims were submitted when these reports were prepared, so figures may be adjusted later.

- a) Ambulatory encounters are face-to-face contacts between a S/HMO member and a provider of health care services. It includes a medical, dental, optometric, podiatric, mental health, and audiologic encounters and encounters with nurse practitioners and physician assistants that are not incident to seeing a physician. Medical referrals include services provided by medical specialists outside of the S/HMO and authorized by the S/HMO.
- b) Includes all physician visits and mental health visits. Non-physician visits are also included.
- c) Total census days in skilled nursing facilities.
- d) Includes nursing and therapist home health visits.
- e) Includes all home health visits (e.g., by a registered nurse, physical therapist, occupational therapist, speech therapist, social worker, home health aide, etc.).
- f) Includes all home health visits by registered nurses and by physical, occupational, and speech therapists.
- g) SNF reported SNF/ICF days paid by the plan. The total SNF/ICF days were 151 PMH in 1985 and 288 PMH in 1986.
- h) Elderplan reported a total of 385 private duty nursing hours during 1985, and 2,320 hours during 1986.
- i) Elderplan did not report any totals for chronic care nursing home health visits during July and August of 1986.
- j) Kaiser reported a total of 1,741 home health aide visits and 363 homemaker visits in 1986.
- k) Includes social day care and day treatment center days.
- l) Includes ambulance, ambulette (i.e., invalid coach), and private car service (with or without assistance).

Chap 6

Table 8

UTILIZATION OF SELECTED AMBULATORY AND CHRONIC CARE SERVICES
ACROSS S/HMO SITES FOR 1,000 MEMBERS PER YEAR
(Figures in parentheses are the actual total units of service during that year)

	Elderplan		Medicare Plus II		SCAN Health Plan		Seniors Plus	
	1985	1986	1985	1986	1985	1986	1985	1986
Total Member Months	5,310	19,640	20,085	47,825	6,704	19,827	2,859	15,711
<u>Medicare Utilization</u>								
Ambulatory Encounters and Medical Referrals[a]	17,333 (7,670)	15,262 (24,978)	10,286 (17,217)[b]	10,267 (40,919)[b]	16,151 (19,477)	11,674 (33,574)	8,970 (2,137)	8,795 (11,467)
Medicare SNF Days	199 (88)	445 (728)	448 (750)[c]	557 (2,219)[c]	550 (307)	1,246 (1,939)	432 (103)	32 (421)
Medicare Home Health Visits [d]	479 (212)	1,077 (1,763)	1,375 (2,301)[e]	1,918 (7,642)[f]	700 (391)	595 (983)	1,234 (294)	76 (995)
Medicare Durable Medical Equipment (Pieces)	- NA	- NA	- NA	- NA	- NA	- NA	- NA	- N
<u>Chronic Care Utilization</u>								
Chronic Care SNF/ICF Days	199 (88)	835 (1,366)	609 (1,019)	1,398 (5,571)	1,487 (831)	1,834 (3,031)	2,565 (611)	1,79 (2,349)
Chronic Care Home Health Visits [d]	273 (121)[g]	78 (128)[g,h]	- NA	98 (392)	199 (111)	70 (115)	609 (145)	58 (768)
Chronic Care Respite, Homemaker Home Aide and Chore Hours	40,165 (17,773)	21,154 (34,622)[g]	4,151 (6,947)	7,557 (30,119)[i]	11,216 (6,322)	15,286 (25,421)	17,377 (4,140)	12,87 (16,860)
Day Care Center Days	151[j] (67)[k]	224[j] (366)[k]	137 (230)	187 (747)	254 (142)	649 (1,073)	2,518 (600)	1,16 (1,522)
<u>Other Expanded Care Utilization</u>								
Dental Office Visits	443 (196)	257 (420)	- NA	- NA	- NA	- NA	1,780 (424)	1,13 (1,485)
Outpatient Prescriptions	15,060 (6,664)	18,172 (29,742)	13,912 (23,286)	15,660 (62,412)	19,434 (10,857)	20,686 (34,179)	- NA	N N
Optometry and Audiology Visits	1,191 (527)	645 (1,056)	- NA	- NA	- NA	- NA	2,019 (481)	1,70 (2,233)
eyeglasses, Hearing Aids, and Durable Medical Equipment (Pieces)	585 (259)	297 (486)	609 (1,020)	408 (1,627)	809 (452)	686 (1,133)	- NA	- N
Emergency Response System (Months)	41 (18)	24 (39)	- NA	- NA	20 (11)	33 (55)	71 (17)	7 (96)
Medical Transportation (Round Trips)	2,235 (989)[k]	2,162 (359)[k]	39 (66)	75 (298)	109 (61)	571 (943)	40 (200)	79 (1,047)

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986. Note: these are unaudited data. Not all claims were submitted when these reports were prepared, so figures may be adjusted later.

- [a] Ambulatory encounters are face-to-face contacts between a S/HMO member and a provider of health care services. It include medical, dental, optometric, podiatric, mental health, and audiologic encounters and encounters with nurse practitioners or physician assistants that are not incident to seeing a physician. Medical referrals include services provided by medical specialists outside of the S/HMO and authorized by the S/HMO.
- [b] Includes all physician visits and mental health visits. Nonphysician visits are also included.
- [c] Total census days in skilled nursing facilities.
- [d] Includes nursing and therapist home health visits.
- [e] Includes all home health visits (e.g., by a registered nurse, physical therapist, occupational therapist, speech therapist social worker and hospice visits, but not home health aide).
- [f] Includes all home health visits by registered nurses and by physical, occupational, and speech therapists, hospice and home health aide visits.
- [g] Elderplan reported a total of 385 private duty nursing hours during 1985, and 2,320 hours during 1986.
- [h] Elderplan did not report any totals for chronic care nursing home health visits during July and August of 1986.
- [i] Kaiser reported a total of 1,741 home health aide visits and 363 homemaker visits in 1986.
- [j] Includes social day care and day treatment center days.
- [k] Includes ambulance, ambulette (i.e., invalid coach), and private car service (with or without assistance).

Table 9

COMPARISON OF AMBULATORY CARE AND SKILLED NURSING CARE UTILIZATION
BY S/HMOs AND SELECTED FEDERALLY QUALIFIED HMOs FOR 1986

	Annualized Total Ambulatory Encounters Per 1,000 Medicare Members	Annualized Medicare SNF Days Per 1,000 Members
<u>Brooklyn</u>		
Elderplan	15,262	445
<u>Los Angeles</u>		
SCAN Health Plan (SHP)	11,674	1,246
FHP	9,700	831
Maxicare	13,100	-
PacifiCare	11,000	-
<u>Minneapolis/St. Paul</u>		
Seniors Plus	8,754	321
Group Health Seniors	-	98
Share	7,800	200
HMO Minnesota	8,600	154
FHP	5,800	-
Med Centers	9,500	-
<u>Portland</u>		
Medicare Plus II	10,267	557

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986;
Unpublished data, Office of Prepaid Health Care, Health Care
Financing Administration, 1987.

ambulatory care expenditures in 1986: Elderplan, \$88 pmpm; Medicare Plus II, \$88 pmpm; SHP, \$79 pmpm; and Seniors Plus, \$72 pmpm (see Table 7). Elderplan had budgeted its ambulatory costs at \$90 pmpm and SHP had budgeted its costs at \$85 pmpm and were able to keep their expenditures within their budget allocation. While Elderplan and SHP were able to control costs within their budget, both planned to give more attention to controlling their physician utilization in the future, especially their specialty referrals, as discussed in Chapter 2. All the S/HMOs were able to reduce their ambulatory expenditures somewhat between 1985 and 1986 except SHP whose expenditures remained the same. Seniors Plus' expenditures were lower than the other demonstrations sites and its number of encounters were significantly lower.

Chronic and Expanded Care

Chronic care utilization and expenditures for the sites included services that were Medicare-covered and non-Medicare-covered. This section examines four types of utilization and expenditure categories. Medicare-covered post hospital services include: skilled nursing home, home health and hospice, and durable medical equipment. These services were entitlements for all S/HMO members, with no eligibility requirements. Non-Medicare expanded care (or supplementary benefits) services include: vision, dental, physical exams, and outpatient pharmacy services. These services were also available to S/HMO members without eligibility restrictions, although benefit restrictions and copayments varied across sites. Non-Medicare-covered chronic care services include: skilled nursing, intermediate care, home health, homemaker, respite, residential care, transportation, meals, day health. These services were provided to individuals that met different specific criteria of moderate to severe impairment levels established by each site. Each site was also allowed to establish different dollar limits on total chronic care benefits, so that clients (or Medicaid) paid for benefits expended beyond this level. This limited the total financial liability of the S/HMOs for services to each individual member. And the final non-Medicare covered service was case management provided to those members who met S/HMO-established criteria of moderate to severe impairment levels, which also varied by site.

In addition to establishing its own eligibility criteria, each site was required by HCFA to limit its initial S/HMO membership to no more than 5 percent who were severely disabled using the nursing home certification criteria. The following percentages of total members were reported by the S/HMOs to be receiving chronic care services: Elderplan, 2.9 percent; Medicare Plus II, 4.9 percent; SCAN Health Plan, 12.1 percent; and Seniors Plus, 11.0 percent in 1986. Chapter 6 describes the disability criteria in detail. With substantially higher proportions of members classified as eligible for long term care services, SHP and Seniors Plus would be expected to have higher chronic and expanded care utilization and expenditure rates than Elderplan and Medicare Plus II.

Medicare Skilled Nursing Home and Home Health Care Services. Table 8 shows the Medicare skilled nursing service utilization. In 1986, all sites had somewhat similar Medicare skilled nursing utilization rates (from 321-557

days per 1,000 member years) except for SHP, which had 1,246 days. SHP has a 388 percent higher utilization rate than Seniors Plus, even though the proportion of severely disabled members were similar for the two S/HMOs.

Table 9 compares the Medicare SNF days per 1,000 members for each of the sites with those of other TEFRA HMOs. In comparison with other TEFRA HMOs, SHP has an unusually high Medicare nursing home utilization rate, and was 45 percent higher rate than FHP in its area. All other S/HMOs showed a slightly higher rate for Medicare nursing home utilization than other TEFRA HMOs, with the exception of FHP in Los Angeles. This suggests that the S/HMOs may have been maximizing Medicare nursing home utilization as a substitute for non-Medicare chronic care nursing home or home health services, and/or that their membership was more impaired than that of the TEFRA HMOs. Data presented in Chapter 5 shows that the S/HMO members generally had slightly higher impairment levels than the TEFRA HMO members.

Medicare nursing home expenditures were highest at SHP, \$23 ppm in 1986, or about 3-7 times higher than at the other sites (see Table 7). In contrast, in 1986, Seniors Plus Medicare nursing home care expenditures were \$3 ppm, Medicare Plus II was \$6 ppm, and Elderplan's was \$7 ppm. SHP was expected to have higher expenditures because its Medicare nursing home days of care per member were 2-3 times higher than any other site. Rates also appeared to be a factor in the skilled nursing costs at SHP. Table 6 shows that SHP paid up to \$210 per day including ancillaries compared to \$165 at Elderplan and \$105 to \$110 at Medicare Plus II and Seniors Plus (see Table 6).

In comparing the utilization of Medicare-covered home health care, Table 8 shows important differences across sites. SHP had the lowest utilization of Medicare home-health care visits of all the sites (595 visits per 1,000 member years compared to 760-1,918 visits at the other sites in 1986). SHP may have been substituting nursing home services for home health care, while Elderplan may have used the reverse strategy. The lower utilization of home health and higher utilization of nursing home services at SHP than at the other sites may be related to corporate sponsorship by St. Mary Medical Center with its own nursing home, its financial risk-sharing arrangements with St. Mary, and weak utilization control over nursing home services (see Chapter 2 discussion). Medicare Plus II reported three times higher home health rates (including hospice visits) and also may have used these as substitutes for Medicare nursing home visits since it also had moderately low nursing home utilization in comparison to other HMOs. These utilization patterns will be studied in greater depth in future evaluation papers.

Chronic Care Services. Chronic care utilization rates and patterns varied substantially across sites. These differences were attributable in part to differences in S/HMO site eligibility criteria for services, in severity of illness levels, and in copayments and benefits. Other factors may have been physician and case management practice pattern differences.

A comparison of non-Medicare-covered chronic care nursing service utilization across the four sites revealed differences in utilization

patterns. In 1986, SHP and Seniors Plus chronic care nursing home utilization rates were 1,834-1,793 days per 1,000 member years compared to 835 days at Elderplan and 1,398 at Medicare Plus II. SHP's and Seniors Plus chronic care nursing home utilization were expected to be higher since both plans had higher rates of members eligible for receiving long term care services than Elderplan and Medicare Plus II.

Elderplan provided more chronic care respite, personal care, home aide and chore hours than any other site (see Table 8). In 1986, Elderplan utilized a 21,154 hours of such services per 1000 members per year. SHP utilized 15,386 hours per 1,000 members per year. Seniors Plus and Medicare Plus II only used about half as many services as Elderplan (12,871 and 7,557 hours respectively). In part, the high utilization may be due to Elderplan's emphasis on community-based long term care and also the fact that the New York Medicaid program had traditionally given more home-health care than any other state. Since Elderplan's personal care service utilization rate was substantially higher and its nursing home utilization for chronic care was lower than any other site, Elderplan may have been substituting in-home services for chronic nursing home care utilization.

Chronic care services represented between 7-10 percent of the total S/HMD expenditures at all the sites (except KP). Expenditures for chronic care (including SNF/ICF, in-home chronic care, homemaker, personal care, and other services not covered by Medicare) were similar across sites: in 1986, Seniors Plus was \$30 pmpm, SHP was \$30, Elderplan was \$32, except for Medicare Plus II which was \$21 (see Table 7). KP may have achieved some economies from spreading its costs across a larger membership. KP, as noted earlier, also had a lower percentage of its members (4.9%) eligible for chronic care, except for Elderplan.

Average expenditures for chronic care services were expected to decline during the second year of operation as the S/HMDs gained more experience and their systems became more established, but this did not always occur. Seniors Plus decreased its chronic care expenditures by 26 percent between 1985 and 1986. SHP reduced its expenditures by 8.5%. Elderplan increased its chronic care expenditures by 27 percent while Medicare Plus II remained the same.

Medicare Plus II developed a budget for its chronic and expanded care services.[7] While its audited costs were \$21 pmpm, Medicare Plus II authorized monthly expenditures for chronic and expanded care rose from \$8.74 pmpm in April 1985 to \$9.14 pmpm in January 1986 and to \$19.92 in August 1986 (i.e., it doubled during the 18-month period). By projecting the same rate increase for 1987, Medicare Plus II estimated that its revenues would not be adequate to cover costs during the last year of the demonstration. Medicare Plus II argued its chronic care costs increased significantly between 1985 and 1986 because its enrollees became older and more frail. Since Medicare Plus II reached its enrollment capacity for the demonstration during the first 18 months, new enrollees were not being added to spread the risk of illness across a broad group.

Expanded Care Services. Table 8 shows the utilization of expanded care (supplemental benefits). In 1986, Elderplan reported a rate four times lower for dental visits than Seniors Plus, while SHP was not able to report its data. In 1986, utilization rates for prescriptions were about one-third lower at Medicare Plus II than at Elderplan and SHP. Elderplan reported one-third the rate of optometry and audiology visits that Seniors Plus had. For eye glasses, hearing aids, and durable medical equipment, Elderplan had lower use of services than SHP in 1986. Elderplan utilization rates for medical transportation services were substantially higher than those of SHP and Seniors Plus.

Expanded care expenditures represented about 7 to 9 percent of total S/HMO expenditures at all sites in 1986 (see Table 7). Seniors Plus and Medicare Plus II expended care expenditures (\$21 ppm) were lower than the \$34 at SHP and \$41 at Elderplan.

Elderplan and SHP were less able to control their costs for such services than Seniors Plus and Kaiser, primarily because of higher utilization rates. The reasons for these higher levels may be (1) the problems associated with establishing and managing new HMOs and (2) the sponsorship by long term care organizations, which gave a heavy service emphasis to long term care service delivery. Impairment levels also did not appear to explain the differences in expenditure rates across sites because Seniors Plus members reported an impairment level as high as that at SHP, and both were higher than at Elderplan members, with its highest expenditure rate for expanded care. These data suggest that the Elderplan needed greater controls on its expanded care service utilization.

Case Management Staff. Case management staff costs represented a small portion of overall expenditures ranging from 2 to 4 percent in 1986 (about \$4.50-15 ppm) (see Table 7). The variations can be explained in part by the differences in eligibility for service and benefit levels. The sites also varied considerably with respect to administrative, clerical, and other support staff time allocated to case management costs. In addition, at the two S/HMOs sponsored by HMOs, the case management costs did not include those services associated with utilization review and discharge planning performed for S/HMO clients by HMO personnel (see Chapter 6 for full discussion).

The Medicare Plus II average audited costs for case management (\$4.50 ppm) were one-half of the costs at the other sites. While Medicare Plus II had a lower rate of individuals receiving chronic care services than other sites except Elderplan and did not include all the costs of discharge planning and utilization review (see Chapter 6), its lower case management costs suggest that some economies of scale may have been achieved with larger enrollments. Seniors Plus, with an established HMO sponsor, had somewhat higher costs than Medicare Plus II, but a higher proportion of its membership was provided with case management services — 19.2 percent compared to 8.5 percent at Medicare Plus II in 1986 (see Chapter 6).

SHP had the highest case management costs (\$15.37 ppm) but provided case

management to a high proportion of its members (20 percent) and included discharge planning and utilization review staff in its budget. Elderplan had costs of \$9.92 pmpm but only provided 5.5 percent of its members with case management services. Elderplan did include discharge planning and utilization review in its costs but this probably would not explain its high costs relative to the proportion of members served (see Chapter 6).

At all sites except Medicare Plus II, case management expenditures declined between 1985 and 1986: Elderplan by 59 percent (pmpm); Seniors Plus by 77 percent; and SHP by 31 percent. This reduction in cost was expected as the sites became more experienced and the initial intake process was completed.

ADMINISTRATIVE EXPENDITURES

Observers of the HMO industry concur that low administrative expense as a percent of revenue contributes to plan success (Luft, 1981; Jurgovan and Blair, 1979). Table 7 shows marketing, administrative, and other related expenditures for each of the sites, although Medicare Plus II only reported administrative costs for chronic care. Marketing expenditures varied substantially across the sites but represented about 10 to 14 percent of the total budget at all sites except Medicare Plus II. Seniors Plus and SHP expenditures were \$39-40 pmpm in 1986 compared to \$53 pmpm for Elderplan. Medicare Plus II had significantly lower marketing expenses than the other sites (\$2 pmpm in 1985 and 1986), since it was able to meet its enrollment targets with a minimal marketing effort (see discussion in Chapter 4).

Administrative expenditures, excluding marketing costs, varied significantly across sites (see Table 7). These differences were expected because the established HMO's sponsors were able to utilize administrative resources from their existing organization for the S/HMO projects, whereas Elderplan and SHP had to establish new administrative structures for all S/HMO operations.

Elderplan administrative expenditures were the highest (about \$199 pmpm for 1985 and \$82 for 1986). Seniors Plus and SHP were able to make substantial reductions (65% and 57%, respectively) between 1985 and 1986, and both had lower costs than Elderplan by 50 to 75 percent (\$25 and \$40 pmpm, respectively) for 1986 (see Table 7). As expected, Medicare Plus II administrative expenditures, reported for chronic care and case management activities only, were low (\$8 pmpm in 1986). Elderplan reported spending 18 percent of its total budget on administration, excluding marketing costs, compared to 10 percent at SCAN and 9 percent at Seniors Plus.

Table 10 shows a comparison of the total administrative expenditures (including marketing costs) as a percentage of the total expenses for the four S/HMOs with selected TEFFRA HMOs in 1986. Elderplan had the highest administrative expenses (36 percent) of any S/HMO or comparison TEFFRA HMO in 1986. Its high costs were in part related to high administrative personnel levels for direct administration and for indirect administrative costs

Table 10

ADMINISTRATION EXPENSES[a] AS A PERCENTAGE OF TOTAL
EXPENSES FOR S/HMOs AND SELECTED FEDERALLY QUALIFIED HMOs, 1986

	<u>Percentage</u>
<u>Brooklyn</u>	
Elderplan	35.5
<u>Los Angeles</u>	
SCAN Health Plan (SHP)	25.1
FHP	23.9
Maxicare	11.2
PacifiCare	11.8
<u>Minneapolis/St. Paul</u>	
Seniors Plus	25.2
Share	11.1
HMO Minnesota	13.8
FHP	13.3
Med Centers	11.8
<u>Portland</u>	
Medicare Plus II	3.5[b]
Medicare Plus (TEFRA HMO)	4.6

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986;
Unpublished data, Office of Prepaid Health Care, Health Care
Financing Administration, 1987.

[a] Figures included compensation, marketing, capital costs, interest,
depreciation, amortization, rent, and other costs.

[b] Kaiser's administrative costs were only for the chronic care services and
excluded administrative costs for acute and ambulatory care.

associated with its physician group, GMA (see Chapter 2 for staffing levels across sites). For SHP and Seniors Plus, the administrative costs were 25 percent of the total, which was also significantly higher than for other TEFFRA HMOs, except for FHP. All the sites except Kaiser had problems with marketing and therefore had higher marketing costs than anticipated.

While high administrative costs were expected for starting a new HMO at Elderplan and SHP, the high costs were not expected at Seniors Plus, with an established HMO sponsor. Seniors Plus' high total administrative costs were primarily related to its marketing costs (14 percent of the total plan costs). The high administrative costs for all the S/HMOs (except Kaiser) may also have been related to HCFA's assumption of the major portion of the initial financial risk.

It should also be noted that some administrative costs were incurred by the sites relative to collecting data and meeting the requirements for the demonstration project. Costs for such activities were not available for this report.

DIFFERENCES IN EXPENDITURE PATTERNS AND TOTAL EXPENDITURES

Not only did the S/HMOs have substantial differences in expenditure patterns for acute and ambulatory care, but also for chronic and expanded care services. When all the S/HMO chronic, expanded care, and case management service expenditures were combined, the following differences were shown for 1986: Medicare Plus II, \$46.00; Seniors Plus, \$60.15; SHP, \$79.65; and Elderplan, \$87.08. Thus, Elderplan had significantly higher expenditures than Medicare Plus II and Seniors Plus for its S/HMO benefits. As noted above, these differences cannot be explained by differences in level of disability since both Elderplan and Medicare Plus II had lower levels of individuals receiving chronic care services than the other two sites. Both the S/HMOs sponsored by established HMOs were able to achieve substantial savings on their chronic and expanded care benefits over that of Elderplan and SHP.

The S/HMOs had hoped that reductions in utilization and expenditures on acute care services could be utilized to expand long term care benefits for its members. KP Medicare Plus II had higher acute care expenditures and similar ambulatory care expenditures. Medicare Plus II had the lowest expenditures for chronic and expanded care services. Medicare Plus II did, however, have lower percentages of its membership eligible for chronic care services than the other S/HMOs except for Elderplan. Medicare Plus II's rapid increase in expanded and chronic care expenditures at the end of the second year, however, created concern whether it could continue to provide the level of S/HMO benefits planned during the remainder of the demonstration.

Seniors Plus, sponsored by an established HMO, was the most successful of the S/HMOs in controlling its hospital utilization and expenditures. Its ambulatory care expenditures were also lower than the new HMOs (Elderplan and SHP). It was able to keep its chronic and expanded care costs at a levels well below Elderplan and SHP, in spite of its relatively high proportion of

severely disabled members.

Elderplan and SHP were able to keep their total service expenditures generally within their budgeted levels. Their expenditures were substantially higher for acute services, as well as for total chronic, expanded care, and case management services. As new HMOs, Elderplan and SHP had to place their major emphasis on controlling all their service delivery costs, and were not able to consider savings from selected services which could be used to cover chronic and expanded care costs during the first 24 months of the demonstration.

Total average expenditures (including financial reserves) also varied substantially across sites, ranging in 1986 from \$286 pmgm at Medicare Plus II and Seniors Plus to \$413 at SHP and \$464 at Elderplan (see Table 11). Between 1985 and 1986, average expenditures per member declined by about 25-32 percent at all the sites except Medicare Plus II which had a 7% increase. The decline at three sites was caused in part by decreased marketing and administrative expenditures at both sites. Elderplan also decreased its overall average expenditures in spite of its increases in expenditures for hospital and chronic care costs by reducing administrative and other costs. Seniors Plus was able to keep its average expenditures per member at a low level in spite of its low enrollment, and showed a reduction in expenditures by lowering its administrative, as well as service expenditures.

FINANCIAL MANAGEMENT ISSUES RELATED TO S/HMO ADMINISTRATION

Special financial management problems occurred at the S/HMO sites during the first two years. Medicare Plus II administrative costs were low, in part, because only those services unique to the S/HMO were reimbursed and administered by the Medicare Plus II demonstration project. Medicare Plus II marketing, membership services, and administration were all provided by KFHP staff rather than by S/HMO project staff. A small overhead rate was estimated for the time and cost of such services provided to S/HMO members. The S/HMO project had a policy to maximize the use of regular Kaiser services for its members and to keep the charges to the S/HMO demonstration low. Kaiser Permanente Northwest admitted that it had no way of tracking the actual costs of services provided to S/HMO members and that the charges to the S/HMO project were understated.[8] Kaiser Permanente Northwest was unable to report actual aggregate costs for Medicare covered services, and its S/HMO expenditure reports were estimated on the basis of project authorizations rather than on actual bills. HCFA auditors reported that the only way to determine Medicare Plus II revenue was to estimate revenues by determining the extra 5 percent paid by HCFA above the AAPCC and the additional premiums less the estimated copayments.[9]

Seniors Plus, as a large HMO, had some of the same problems that Kaiser had in tracking and reporting its expenditure data. A 1986 HCFA audit found that the accounting records for Seniors Plus were in good order with a clear audit trail, but the S/HMO was using a cash accounting system, not claiming expenditures until billed. HCFA recommended that Seniors Plus adopt a full

Table 11

S/HMO EXPENDITURES FOR 1985 AND 1986
(Figures in parentheses are standardized per member per month)

	Elderplan		Medicare Plus II[a]		SCAN Health Plan (SHP)		Seniors Plus [b]	
	1985	1986	1985	1986	1985	1986	1985	1986
Total Member Months	5,310	19,640	20,085	47,825	6,704	19,827	2,859	15,719
Service Expenses	1,433,394 (269.94)	5,616,169 (285.96)	5,144,572 (256.14)	12,979,227 (271.39)	1,718,229 (256.30)	5,500,680 (277.43)	639,752 (223.77)	3,230,119 (205.49)
Administration and Other Expenses	2,157,140 (406.24)	3,296,056 (172.92)	222,743 (11.09)	703,984 (14.72)	1,778,534 (265.29)	2,254,993 (113.73)	563,520 (197.10)	1,278,359 (81.33)
Risk Reserves	41,312 (7.78)	108,278 (5.51)	0	0	196,829 (29.36)	441,533 (22.27)	-	-
Total Expenditures Plus Reserves	3,631,846 (683.96)	9,120,503 (464.38)	5,367,315 (267.23)	13,683,211 (286.11)	3,774,040 (562.95)	8,197,206 (413.44)	1,203,272 (420.87)	4,508,478 (286.82)

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986. These are unaudited data.

[a] Kaiser member month statistics used were based on HCFA statistics and vary slightly from the numbers used by the S/HMO program. The Oregon State Medicaid program excluded long term care eligible clients at initial enrollment from the project.

[b] Seniors Plus expenditure data may be incomplete due to accounting and reporting procedures. Data reported in July 1987.

accrual basis of accounting for reporting costs and revenues, but this was not accomplished until October 1987. Seniors Plus expenditures were also based on estimates of the total portion of GHI costs in areas such as physician, clinic, and support services. Since Seniors Plus was one of many projects that shared common costs with GHI, GHI developed its own methodology for allocating costs.[10] In July 1987, Seniors Plus had not yet claimed some general administrative costs from GHI services for selected services such as claims processing and enrollment services.

As noted in Chapter 2, all the S/HMOs had complex financial relationships with their partners/sponsors. Under Federal regulation, costs provided by related organizations must not exceed the price of the comparable services, facilities, or supplies that could be purchased elsewhere (42 CFR 405.427(a)). The HCFA audit for Seniors Plus did not identify any problems in this area, but both Elderplan and SHP were found to have problems with financial charges during their first HCFA audit review. Since Elderplan was directly related to MJGC and its subsidiaries and to GMA, certain charges were not allowed by HCFA.[11]

HCFA also considered some of the financial payments made by SHP to SCAN, its parent corporation, to be in violation of the "related party" regulations. SCAN records were found by HCFA and state auditors to be inadequate to support certain personnel and administrative overhead charges. Since SHP also employed an administrative staff, it was not clear what unique administrative services were being performed by SCAN.[11] Because of difficulties with the management services agreement, SHP modified its a management agreement with SCAN in 1986 and 1987, to eliminate indirect costs and certain personnel costs. SHP was also found to be out of compliance with the state requirement that general and administrative expenses should not exceed the ratio of 25 percent of plan revenues.

REVENUE SOURCES

Table 12 shows the overall revenue generated by the S/HMOs was \$39 million for 1985 and 1986. Kaiser had the highest revenues, \$5.1 million in 1985 and \$13 million in 1986, reflecting its higher enrollment. For 1985 and 1986 SCAN had \$9.2 million in revenues; Elderplan, about \$7.6 million; and Seniors Plus, with its lower enrollment, \$4.2 million. The overall revenues for all of the S/HMOs increased substantially between 1985 and 1986 as their enrollments increased.

The revenue sources of the S/HMOs are shown on Table 12. Total revenues varied considerably across sites, based on total member months of enrollment and differences in payment methods for each revenue source. Revenues came from Medicare, subscriber premiums, Medicaid, copayments, and other sources. Each source is discussed separately.

Table 12

S/HMO REVENUES FOR 1985 AND 1986

(Figures in parentheses are standardized per member per month)

	Elderplan		Medicare Plus II [a]		SCAN Health Plan (SHP)		Seniors Plus	
	1985	1986	1985	1986	1985	1986	1985	1986
Total Member Months	5,310	19,640	20,085	47,825	6,704	19,827	2,859	15,719
Premiums (Dues) (Medicare only ppm)	\$146,496 (29.08)	\$545,958 (28.93)	\$976,521 (48.62)	\$2,292,612 (47.94)	\$253,880 (39.96)	\$710,770 (39.23)	\$84,017 (29.50)	\$387,709 (25.12)
Copayments (Medicare only ppm)	53,238 (10.59)	234,273 (12.42)	13,249 (.66)	68,857 (1.44)	0[a]	0[b]	28,819 (10.12)	131,948 (8.55)
Medicare AAPCC (Medicare only ppm)	1,313,242 (260.67)	4,592,946 (243.40)	4,037,931 (201.04)	10,251,909 (214.36)	1,927,610 (303.42)	5,870,824 (324.01)	562,109 (197.37)	2,947,543 (190.94)
Medicaid Capitation (Medicaid ppm)	95,159 (349.85)	290,274 (376.98)	54,905[c]	361,970[c]	44,993 (128.19)	349,280 (204.50)	2,811 (255.55)	54,927 (194.78)
Interest	10,094	56,125			15,676	50,537	538	50
Other Revenue	14,695	6,975	41,247	97,111	0	-8,694[d]	1,278	12,082
Total Revenue (Total ppm)	1,633,024 (307.54)	5,726,551 (291.58)	5,123,953 (255.11)	13,072,459 (273.34)	2,242,159 (334.45)	6,972,727 (351.68)	679,571 (237.70)	3,534,260 (224.84)

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986. These are unaudited data, and subject to final adjustments.

[a] Kaiser member month statistics used were based on HCFA statistics and vary slightly from the numbers used by the S/HMO program.

[b] SCAN charged copayments, but these were collected by providers and not reported to SCAN.

[c] The Oregon State Medicaid program excluded long term care eligible clients at initial enrollment from the project. This capitation includes the AAPCC and premiums.

[d] SCAN showed a net loss in this category for the year.

Medicare Payments

Medicare payments represented between 78 and 86 percent of total S/HMO revenues in 1985 and 1986. Revenues from Medicare varied across sites on the basis of S/HMO membership. The Medicare capitation payment level for each enrollee was based on age, gender, welfare status, health status, and institutional status. Each S/HMO received 100 percent of modified adjusted average per capita cost (AAPCC) formula for its region paid by Medicare for the Part A and B members. [12] The Medicare AAPCC rate for the S/HMOs was further modified to subtract community members who were in bed or at home most or all of the time because of a disability, or who needed the help of another person in getting around in the community (about 5% of the community sample), making the AAPCC rate for the nondisabled lower than the current AAPCC. Medicare paid the AAPCC institutional rate for all members living in the community who were determined to be nursing home certifiable according to predetermined state Medicaid criteria for disability.

Differences in total per member per month (pmpm) revenues were due to differences in Medicare AAPCC pmpm rates across sites based on the location, age, gender, and institutional status of enrollees. Table 12 shows Medicare revenues for the first 24 months, which in 1986 ranged on average from \$191 (pmpm) at Seniors Plus to \$214 at Medicare Plus II, \$243 at Elderplan, and \$324 at SHP. The average SHP Medicare rate in 1986 was 70 percent higher than the rate at Seniors Plus.

Medicare revenues increased at two sites (Medicare Plus II and SHP) between 1985 and 1986 and declined at two sites (Elderplan and Seniors Plus). The decrease in rates may reflect a reduction in membership disability levels at Elderplan and Seniors Plus, which used queuing to prevent more than 5 percent of their initial enrollment from being disabled. The decreases also reflect changes in the 1986 AAPCC payment rate and the two percent reduction in overall payments mandated for Medicare providers during the period. At Medicare Plus II and SHP, the increase in rates may have reflected the changes in the composition of the members and their disability levels and AAPCC inflation adjustments.

Premiums

Revenues for the S/HMOs also came from the monthly premium paid by each S/HMO member (except for those on Medicaid). The monthly premium rate was established by each S/HMO and ranged from \$29-49 (see Table 13). With the exception of Seniors Plus, which lowered its premium in 1986, premium levels remained unchanged during the first 24 months. In 1987, SHP while retaining its regular plan, added a low-option premium of \$25 a month, which excluded dental services. The S/HMOs reported that their premiums were not generally established at a high enough level to cover the difference between expected Medicare and Medicaid revenue and the projected costs of providing plan benefits. Their major consideration in setting initial premium levels was to be price competitive with the existing HMO and Medicare supplemental insurance options in their respective markets (Leutz et al., 1985). Premiums

Table 13

PRIVATE PREMIUM RATES FOR S/HMOs
(For non-Medicaid members)*

	<u>1985</u>	<u>1986</u>	<u>1987</u>
Elderplan	29.89	29.89	29.89
Medicare Plus II	49.00	49.00	49.00
SCAN Health Plan (SHP)	40.00	40.00	40.00/ 24.95[a]
Seniors Plus	29.50	24.95	24.95

Source: S/HMO Demonstration Projects. Unpublished data,
1986.

[a] SCAN developed a low-option premium that excluded dental
care for 1987.

represented 10 to 11 percent of total 1986 S/HMO revenues except at Medicare Plus II, where they were 17.5 percent.

Copayments

In addition to premium income, each S/HMO had revenues from copayments for selected services (see Table 12). Each S/HMO established its own copayments, which were small. For example, copayments for prescription drugs were from \$1-2 per prescription; eyeglasses, from \$0-10 per pair (50% at Seniors Plus); foot care, about \$2; hearing aids, \$40-50 per aid; and home-health services, from \$5-10 per visit. The S/HMOs had estimated that cost sharing on chronic care benefits would be about 10-20 percent of chronic care costs (set at a maximum of \$6,500-12,000 per year for those in need of services) (Leutz et al., 1985). Actual revenues from copayments represented only a small portion of total revenue (1-4%), as expected since only a small portion of the enrollees used these chronic care services. However, copayment revenue represented 16 to 22 percent of the chronic care expenditures at Seniors Plus and Elderplan in 1986.

Medicaid Payments

The S/HMOs also had revenues negotiated through capitation contracts with state Medicaid agencies to provide services to Medicaid recipients who voluntarily enrolled in the program. The Medicaid percentage of total revenues was considerably lower than anticipated (1-5%) because of low Medicaid enrollment at each site (see Table 12). Medicaid enrollment had been expected to represent 12.5 to 20 percent of the total enrollment, but was actually only 1 to 2.5 percent of enrollment at Medicare Plus II and Seniors Plus, 4 percent at Elderplan, and 11 percent at SHP.

Each state Medicaid capitation rate methodology was different, based on the state eligibility criteria for specific aid categories and benefits negotiated in the contract. Two states (California and Minnesota) made adjustments for aged and institutional status, and two states (Oregon and New York) used composite rates (shown in Table 14).

Medicare Plus II. Medicare Plus II developed a Medicaid contract with the Oregon State Division of Adult and Family Services (AFS) for Title XIX recipients who are not impaired. The Oregon State Senior Services Division (SSD), which was responsible for Title XIX recipients who needed long term care services, would not agree to a contract with Medicare Plus II. SSD was already under contract for their clients to receive services from the Multnomah County Aging Services Program, which provided case management and long term care services to approximately 6,000 eligibles. SSD was concerned that the Medicare Plus II project was too medical in its orientation and would potentially require a reduction in County case management staff if contract funds were shifted to Kaiser Permanente. AFS decided to participate in the S/HMO program because it was oriented toward prepayment options and wanted to test the idea of providing prepaid HMO services to prevent the aged (under the Old Age Assistance program) from needing long term care services. Eligibles

Table 1a

STATE MEDICAID S/HMO REIMBURSEMENT RATES

Aid Group	CY 1985	CY 1986	CY 1987
<u>California Medicaid Rates[a]</u>			
PA Aged	\$ 78.06	\$ 84.09	\$ 88.49
PA Blind	86.13	94.87	109.67
PA Disabled	86.13	80.68	107.79
MNNSOC Aged	58.41	61.99	79.43
MNNSOC Blind	80.12	88.15	170.86
MNNSOC Disabled	80.12	90.18	136.51
LTC Certified Aged	907.95	1,032.53	1,083.53
LTC Certified Blind	952.98	1,157.04	820.43
LTC Certified Disabled	952.98	1,212.72	1,027.39
<u>New York Medicaid Rates</u>			
Composite Rate for SSI and Medical Assistance Only	361.82	378.32	395.34[b]
<u>Oregon Medicaid Rates</u>			
Composite Rate for Old Age Assistance Noninstitutional Members[c]	351.96	349.05	394.11
<u>Minneapolis Medicaid Rates[d]</u>			
	FY 1986	FY 1987	FY 1988
Aged & Blind Female 65-75	114.13	119.84	125.83
Aged & Blind Female 75+	86.55	90.88	95.42
Aged & Blind Male 65-74	134.97	141.72	148.80
Aged & Blind Male 75+	95.68	100.46	105.49
Disabled Female 65+	117.58	123.46	129.63
Disabled Male 65+	144.02	151.22	158.78
Institutional Aged, Blind, Disabled			
Intermediate Care Facility II 65-74	145.50	152.78	160.41
Intermediate Care Facility II 75-84	118.59	124.52	130.75
Intermediate Care Facility II 85+	78.00	81.90	86.00
Intermediate Care Facility I 65-74	193.08	202.73	212.87
Intermediate Care Facility I 75-84	135.81	142.60	149.73
Intermediate Care Facility I 85+	112.96	118.61	124.54
Skilled Nursing 65-74	271.12	284.68	298.91
Skilled Nursing 75-84	188.27	197.68	207.57
Skilled Nursing 85+	141.01	148.06	155.46
Nursing Home Certifiable in Community			
Aged & Blind Female 0-75	1,869.43	1,962.90	2,061.05
Aged & Blind Female 75+	1,841.85	1,933.94	2,030.64
Aged & Blind Male 0-75	1,890.27	1,984.78	2,084.02
Aged & Blind Male 75+	1,850.98	1,943.53	2,040.71
Disabled Female	1,873.15	1,966.81	2,065.15
Disabled Male	1,899.32	1,994.29	2,094.00

Source: California Department of Health Services, Rate Developmental Branch, Sacramento, CA, 1985, 1986, and 1987; S/HMO Demonstration Projects. Unpublished data, 1987.

- [a] The 1986 SCAN rates reflect a difference in the addition of \$2.57 for dental (95% of \$2.71), and the removal of the SSI/SSP offset of the LTC certified rates. The above rate is established at 95% of fee-for-service equivalent costs.
- [b] Estimated rate at 4.5% increase.
- [c] Excluded Medicaid members who were in institutions or were nursing home certifiable or who needed long term care. Oregon rates were based on 95% of the AARCC for welfare members developed by HCFA and was \$38 ppm. The rate shown includes the combined Medicaid and Medicare rate. The 1987 rate is based on the actual AARCC and forecast demographics.
- [d] Minnesota rates for the first half of 1986 remained the same as 1985. Rates for the FY 1987 reflect a 5% increase over FY 1986. FY 1988 rates are 5% above FY 1987.

who later required long term care services were required under the Medicaid contract to receive them from the County SSD contract. AFS estimated that approximately 1,200 to 1,500 individuals would be eligible to join under the contract, but unfortunately, Kaiser Permanente had a low enrollment response with only 108 enrollees at the end of 24 months.

AFS established a composite rate for Medicare Plus II based on 95 percent of the AAPOC for welfare members for all Medicare-covered health care services including hospitalization and physician care (see Table 14). The contract specifically excluded all chronic care services not provided under Medicare and excluded any Medicaid member certified to need chronic care services upon initial enrollment. Any Medicaid member needing chronic care services after enrollment in the S/HMO received such services from the Multnomah County Aging Services program.

Seniors Plus. The Minnesota State Department of Human Services developed a contract with Seniors Plus for voluntary enrollment by Medicaid members, initially in Hennepin County and expanded to cover the seven-county S/HMO service area. Even though the state approved the program, the counties also had to approve the project before marketing. Ramsey County did not approve the project until March 1987, and three other counties did not agree to participate. Start-up was delayed in Hennepin County until July 1985, and some counties started even later.

At the same time that Seniors Plus was being organized, the state Medicaid program developed another demonstration project for prepaid health care, which tested mandated enrollment but excluded long term care coverage. This program included Seniors Plus as one of many HMO options. Marketing for this Medicaid demonstration was handled under a private contract arrangement. As a result of possible confusion between the S/HMO and this demonstration, the delay in start-up, and a poor response by Medicaid members to Seniors Plus marketing efforts, only 22 members enrolled during the first 24 months.

The Medicaid contract with Seniors Plus provided for a complex capitation rate based on level of care needs within the eligibility categories of aged, blind, and disabled (see Table 14). Individuals living in an institution (either intermediate care level I or II or a skilled nursing home) were eligible to enroll and received a higher rate. Individuals living in an institution who spent down to the state Medicaid eligibility level were also eligible to join the S/HMO. Individuals living in the community who were nursing home certifiable also received the institutional rate. Those Minnesota Medicaid recipients who were in nursing homes received 100% of the per diem rate for the facility and care level where they were residing. If such individuals spent down, the state would pay the per diem rate minus the spend-down amount. For those individuals residing in the community who, after enrollment, were admitted to a nursing home, the state agreed to pay 80% of the per diem rate for the facility after the first 90 days of care. Prior to this, the S/HMO would be responsible and for the 20% of per diem not covered by the state. The state also attached a sliding scale provision to the rate for those individuals in the community who were nursing home

certifiable based upon the percentage of the total Medicaid numbers in relationship to the total number of nursing home certifiables. This provision lowered the payment rate as the percentage of Medicaid to the total increased.

SCAN Health Plan (SHP). At SHP, the state had a contract with the California State Department of Health Services to provide Medicaid services to aged, blind, or disabled Medicaid recipients in three categories: public assistance/cash grant recipients, medically needy with no share of cost, and eligibles certified for nursing home care. A contractual arrangement with the medically needy spend-down category was not authorized during the first two years of the contract. Rates were established on the basis of 95 percent of fee-for-service equivalent costs for all Medicaid benefits for each separate eligibility category with age and institutional adjustments (see Table 14). SHP also had low Medicaid enrollment with only 221 during the first 24 months. California was disappointed with SHP enrollment, but since the state was not sharing any financial risk for the Medicaid enrollees, it had little at stake in the outcome of the project.

Elderplan. The Elderplan Medicaid contract with the New York City Department of Social Services was limited to Supplemental Security Income (SSI) recipients (estimated at 74% of the total) and persons eligible for medical assistance only (estimated at 26%), and excluded those who spent down to Medicaid. The Medicaid agency, however, allowed individuals to use their spend-down to purchase the S/HMO premium and other medical expenses and then to exhaust their spend-down requirements, after which Elderplan would pay the remaining costs. The New York contract had a unique feature in that Medicaid eligibles who joined the S/HMO were guaranteed six months of eligibility.

The handling of the spend-down clients became an issue because Elderplan charged Medicaid on a fee-for-service basis for these individuals. In June 1986, the New York State Department of Social Services formally urged Elderplan to enroll those individuals who were spending down by having them pay for the premium. Medicaid officials believed that by charging Medicaid for the spend-down clients, Elderplan created billing problems, did not test the capitation concept, and charged Medicaid more than would otherwise have been charged. Elderplan apparently argued successfully with the state that the protocol called for a fee-for-service payment for spend-down clients.

The New York State Medicaid capitation rate was based on the costs of providing the basic core of Elderplan services, additional Medicaid services, reimbursement for administration, management information system (MIS) development and operations, and an inflation factor over the previous year. The New York Medicaid reimbursement rate was a composite rate for all eligibility categories, for institutionalized and community recipients, and for 10 percent of the severely disabled (see Table 14). The Medicaid rate was based on the estimated costs of four components: (1) the actuarial estimate of the cost of hospital days incurred beyond the Medicare Part A benefit (estimated at 42% for Medical Assistance only hospital days and at 10 percent of the SSI hospital days); (2) all chronic care costs for long-term impaired

enrollees; (3) appropriate share of case management costs and a share of the overall administrative costs; and (4) all other non-Medicare-covered costs (e.g., drugs, optometry, eyeglasses). The rate was developed by Brandeis and Elderplan using disability estimates from the 1977 Current Medicare Survey with rate adjustments for inflation (Leutz et al., 1985).

In 1986, Elderplan and the state found a 20 percent severely disabled rate for Medicaid enrollees in Elderplan in the first 18 months, so the composite rate might have been estimated at too low a level. Since the actual utilization experience of this group had not been examined, however, no change was made in the rate formula for 1986 and 1987. Instead, an inflation adjustment factor was used to increase the rates.

The New York State Department of Social Services complained about Elderplan's failure to meet its enrollment projection of 700 Medicaid members, since only 106 Medicaid members had been enrolled at the end of 1986. As noted above, New York's concern was that the state was sharing the risk at approximately a 20 percent rate and yet its proportion of the membership was only 4 percent at the end of the first 24 months. State officials raised questions about Elderplan's marketing strategy toward Medicaid recipients. They argued that Elderplan should not be marketed to Medicaid members in the same way as to Medicare members. They believed that Elderplan should have developed improved marketing materials that emphasized access, quality, personal attention, and guaranteed coverage to address the concerns of the over-65 Medicaid population. In addition, it was recommended that Elderplan contact the over-65 Medicaid population personally in senior citizen centers, Social Security offices, and housing projects. There was little evidence that Elderplan made this effort to bring in Medicaid patients, but some presentations were made at senior centers.

Elderplan's marketing effort and provider services generally were not focused where most Medicaid recipients received their primary care services. In fall 1986, a New York state study of primary care utilization patterns in the Brooklyn area showed that most elderly Medicaid recipients utilized medical care from clinics in the Bay Ridge-Sunset Park, Flatbush, and Central Brooklyn neighborhoods instead of from private physicians. It was suggested that Elderplan should concentrate on establishing adequate hospital clinic linkages and possibly satellite centers to attract Medicaid recipients in these neighborhoods. Elderplan expanded its primary care to the Ocean Park area in 1987, and hoped to add new members through this arrangement. Elderplan argued that the Medicaid market is difficult to enroll and failed to respond to all its marketing efforts, including direct mail and telemarketing.

FINANCIAL EFFECTS OF THE S/HMO PROJECTS ON THE SPONSORS

The revenues and losses of each S/HMO had an important impact on its sponsor/partner. Although the S/HMO was only one project located within Kaiser Permanente Northwest, its \$13 million in revenues represented 4.6 percent of total KFHP and KFH revenues (\$280 million) in 1986. As noted above, Kaiser Permanente Northwest experienced a slight loss of revenues in

1986. Thus, the fact the S/HMO project did lose money on its Medicare covered services was problematic.

Seniors Plus was one of 10 products sponsored by GHI, with less than 1 percent of GHI's total membership. Seniors Plus revenues of \$3.5 million represented 2.5 percent of the total GHI revenues in 1986. Ebenezer received about \$6 million in revenues from Seniors Plus, or 2.6 percent of its total revenues in 1986. Therefore, the revenues from the S/HMO represented small proportion of total revenues. On the other hand, the Seniors Plus losses were of concern to the sponsors because both were experiencing their own financial problems unrelated to the S/HMO project. While the second year losses of Seniors Plus were limited to \$.5 million with HCFA assuming most of the remaining losses, the total Seniors Plus loss of \$.9 million in 1986 were of surprise and concern to both GHI and Ebenezer managers. These financial losses were considered not only a lost opportunity but a potential financial liability for the sponsors in the future when they assume full financial risk. While GHI and Ebenezer agreed to continue the S/HMO demonstration at full financial risk beyond the first 30 months, they reduced the level of effort in marketing and instituted greater controls on queuing those with disabilities and controls on program utilization and expenditures after the first 18 months of the project.

Elderplan's revenues of \$6.6 million represented 12 percent of the total \$55 million in MJGC revenues in 1986 (but these revenues were not included in the total MJGC revenues). While MJGC contributed to Elderplan to cover the startup costs for the first 30 months, Elderplan made contributions to MJGC in bringing in new revenue to MJGC's nursing homes and home care programs. MJGC had a net loss of \$2.8 million in 1986, which had to be covered by private fund raising efforts. Thus, the MJGC's initial investment in Elderplan, primarily through loans, represented a sizeable effort. The 1986 Elderplan total losses of \$3.4 million were even greater than those losses experienced directly by MJGC. While HCFA assumed the majority of the initial losses and MJGC assumed \$.5 million during the second demonstration year, such large losses in the future represented a serious potential problem for MJGC. Elderplan has increased its enrollment, has met its utilization targets, and has made major changes to control its costs.

The unexpectedly high initial Elderplan losses have necessitated a reevaluation of the future of the demonstration. MJGC has various options, including to find a partner or a buyer for Elderplan or to discontinue the demonstration. Whether MJGC could find a partner or a buyer for Elderplan may depend on a number of factors described by Goran (1981) including: the promise of a reasonable rate of return on investment in the future; the liquidity of the plan; the ability of the plan to attract and maintain members; evidence of management capability to achieve its utilization targets; and a sound business plan. Discussions were underway with potential joint venture partners at the time this report was written.

SHP was the only plan that represented a major portion of its sponsor (SCAN) organization's budget and activities. SCAN, with no capital of its

own for start-up, had to rely on a \$1 million loan from St. Mary to initiate SHP. In 1986, SHP reported \$8 million in revenues while its parent, SCAN, had only \$1.9 million in revenues. The SHP losses of \$1.2 million in 1986 would have been a complete threat to the financial survival of SCAN if SHP had been at full financial risk during the initial period.

Initial losses at SHP were significantly higher than expected by either SCAN or St. Mary. Although SCAN was limited in its financial ability to contribute to SHP, St. Mary was in a position to assist SHP. St. Mary reported a 7 percent increase in revenues over the previous year and \$46 million in fixed assets net accumulated depreciation in 1986. While SHP represented only a small proportion of St. Mary's budget (3 percent of St. Mary revenues in 1986), it did contribute to St. Mary's income. In February 1987, St. Mary agreed to defer the debt payments of the principal and interest because of the financial problems experienced by SHP.[13] In 1987, St. Mary also determined that it was willing to assume full financial risk for SHP during the final period of the demonstration, if some substantial changes could be made in SHP benefits, and operations which would make SHP a more financially viable operation.

In retrospect, the sponsors/parent organizations, except for Kaiser, reported that they did not understand the potential financial problems involved in sponsoring the S/HMO demonstration projects. All four of the organizations that undertook the demonstrations experienced, during the initial period of the demonstration, some unexpected form of financial problems unrelated to the demonstration. These financial problems contributed to the pressure for the S/HMOs to achieve greater efficiency as the sponsors went into the period of full financial risk.

DISCUSSION

All of the S/HMOs (except Kaiser) overestimated their total revenues because of lower-than-expected Medicare and Medicaid enrollments during the first 30 months of operation. Low revenues and high administrative costs related to S/HMO start-up were problematic for the new HMOs (Elderplan and SHP), as well as for Seniors Plus. The S/HMOs underestimated the marketing effort needed, and marketing costs were especially high for the three S/HMOs with low enrollments as they attempted to reach their enrollment goals.

All the sponsors were having at least some financial difficulties unrelated to the S/HMOs and (except for KP) underestimated the overall cost of undertaking the demonstration project. Sponsoring agencies of any new S/HMOs that may be developed in the future should be financially sound, should understand the costs of initiating such a demonstration, and should make a clear management and financial decision that the organization is willing to make a commitment to such a project.

The problems of high service costs for the two S/HMOs (Elderplan and SHP) that were newly formed HMOs were caused in part by high acute and ambulatory utilization and as well as high expanded care costs. The two

established HMOs (KP and Group Health) that added the S/HMO projects as new products to their existing service plans appeared to be better able to control costs. The exception to this was the higher acute care costs reported by KP. In part, the HMO sponsors were able to develop budgets based on past experience, and were able to economize by using their existing service delivery networks and physicians experienced in controlling utilization and expenditures.

Elderplan and SHP had no experience in delivering prepaid care or experience on which to base their financial budgets and utilization objectives. These organizations had limited capital for start-up and the start-up costs represented major financial efforts. The fact that two long term care organizations were able to develop into HMOs, although limited to the elderly, and deliver services within a short start-up period was rather remarkable and demonstrated the commitment of the organizations and the individual project directors and their staffs. While the problems encountered in building new HMOs from long term care organizations were expected, the difficulties raise questions about the rationale of such an approach for the future.

If an organization wishes to become a S/HMO, the first stage is to develop an HMO, whether a new HMO or a partnership arrangement with an established HMO like the Group Health and Ebenezer arrangement. After a new HMO is formed, it must make choices about whether or not to serve the Medicare population, and if so, what type of arrangement to make with HCFA regarding contractual cost or risk arrangements. All of these organizational and management decisions must precede the development of a S/HMO. The difficulty of this task must be underscored for long term care organizations considering this process in the future.

The ultimate test remains of whether the four established S/HMOs can become viable financial organizations or product lines within larger HMO organizations and survive after the S/HMOs assume full financial risk. Will the S/HMOs be able to bring their administrative costs into line with those of more established TEFRA HMOs and will they be able to control utilization and expenditures at the level attained by their competitors? Will the S/HMO members become increasingly disabled and in need of long term care services to the extent that the S/HMOs will not be able to control long term care expenditures within budgeted levels?

Several options are available to the four established S/HMOs to become more financially viable. One is to reduce benefits and to control access to long term care services. The risks in this approach are clear because the S/HMO benefits are already viewed as limited in comparison to the potential costs of long term care, even though their benefits were greater than the TEFRA HMOs. Reductions in benefits may make the S/HMOs indistinguishable from TEFRA HMOs and only increase marketing problems. Another option is to redefine the product as a high-option benefit, coupled with a low-option TEFRA plan within an HMO. This approach may make the product more understandable and marketable. A third option is to increase the extent of

financial risk-sharing with S/HMO providers, including the long term care providers, and use greater financial incentives for S/HMO providers to control costs. This effort would shift the risk away from the sponsors and toward service providers. Other options are to reduce provider reimbursement rates and increase administrative efficiency. These options along with other approaches may be tested by the S/HMOs over the next demonstration period and will be the subject of the next project evaluation.

SUMMARY FINDINGS

- o Medicare Plus II experienced a net balance of \$650,000 in revenues over expenses during its first 22 months on its chronic care but an overall loss of \$854,000. The other S/HMOs reported net losses: Elderplan, \$5.4 million; SHP, \$2.7 million; and Seniors Plus, \$1.5 million.
- o Medicare Plus II from the outset of the demonstration, assumed the financial risk for all Medicare-covered services, while HCFA assumed the financial risk for chronic care services covered for the first 18 months. The other sites limited their initial financial risk to \$425,000-\$750,000 during the first 30 months of the demonstration. HCFA, along with the Minnesota and New York Medicaid programs, agreed to cover any remaining financial losses. After the S/HMOs (except Medicare Plus II) reached their initial financial risk ceiling early in the demonstration period, they had little incentive to restrain costs since HCFA and two state programs were paying the remaining costs.
- o All S/HMOs were able to keep their hospital utilization rates close to their target levels and lower than the average Medicare fee-for-service utilization rates. SHP had higher hospital admission rates and Elderplan had longer hospital lengths of stay than the other S/HMOs and comparable TEFRA HMOs.
- o Overall, hospital expenditures represented a high proportion of the total S/HMO budgets, ranging from 23 to 27 percent of the total expenditures at three S/HMOs to 43% at Medicare Plus II and, thus, were key to controlling costs. The two new HMOs were less able to control these costs than Seniors Plus. The high expenditures at Medicare Plus II were not understood.
- o Elderplan and SHP had higher ambulatory care encounter rates than the S/HMOs that were established by HMO sponsors (Medicare Plus II and Seniors Plus) and other TEFRA HMOs. These higher encounter rates, in part, led to higher expenditure rates than desired, although their expenditures were within budgeted levels. This was not surprising considering the difficulties Elderplan and SHP had in establishing and managing their new physician service delivery systems. Ambulatory care expenditures ranged \$72-88 ppm, or from 19-30 percent of total S/HMO expenditures.
- o Chronic and expanded care service utilization patterns varied

substantially across sites. Elderplan utilized more home health and community-based long term care services, while SHP utilized more nursing home services than the other S/HMOs. Both Elderplan and SHP, as long term care organizations, had higher chronic care utilization than Medicare Plus II and higher expanded care than either Medicare Plus II or Seniors Plus.

- o Case management staff expenditures represented a small proportion of total S/HMO expenditures (2-4 percent in 1986). Variations across sites appeared to be related, in part, to differences in plan services and benefit eligibility criteria.
- o Chronic care expenditures rates were similar across the S/HMOs (\$30-32 pm/m) except at Kaiser which was \$21 pm/m in 1986. For expanded care, Medicare Plus II and Seniors Plus had \$21 pm/m, SHP had \$31 pm/m and Elderplan had \$41 pm/m. When total expenditures for chronic care, expanded care, and case management were combined, significant differences in expenditures were found. Elderplan (\$83 pm/m) and SHP (\$80 pm/m) expenditures were higher than Medicare Plus II and Seniors Plus. Chronic care, expanded care and case management services represented 16-21 percent of total S/HMO expenditures.
- o Marketing expenditures represented 10 to 14 percent of total costs (at all but one site, Medicare Plus II).
- o S/HMO total administrative expenditures including marketing ranged from 25 to 36 percent of total S/HMO costs, except at Medicare Plus II (3.5%), who only reported administrative costs for chronic care, expanded care and case management. Except for Medicare Plus II, these expenditures were higher than those reported by competing TEFRA HMOs, because of high marketing costs, except at Medicare II.
- o Total S/HMO revenues ranged from \$4.2 million at Seniors Plus to \$18 million at Kaiser Medicare Plus II during 1985 and 1986, reflecting differences in enrollment levels and membership characteristics. These revenues were lower than expected because of lower than estimated enrollments at all sites except Medicare Plus II. Of total S/HMO revenues, 78 to 86% was from Medicare, 2 to 5% was from Medicaid (10% expected), and the balance was from private premiums, fees, and other sources.
- o Except for Medicare Plus II, the initial losses by the S/HMOs were of concern to their sponsoring organizations, which were all experiencing financial problems unrelated to the S/HMO projects. Since these S/HMOs agreed to assume full financial risk after the first 30 months, the sponsoring organizations had to make changes in the projects to lower costs. All sponsors were committed to continuing the demonstration project and were facing decisions about the future viability of the projects beyond the demonstration period.

- o The financial and personnel resources necessary to establish a viable S/HMO project are greater for long term care organizations than for established HMOs. Future projects are most feasible for established TEFRH HMOs or for partnerships between an established HMO and a long term care organization.

NOTES

- [1] The start-up costs that should be reimbursed by HCFA have also been an issue of discussion between sites and HCFA, during the period from the fall of 1983 until the S/HMOs began operation in 1985. HCFA disallowed approximately \$160,000 in start-up costs and \$32,000 in amortization expenses at SCAN after the first audit, including expenses for lobbying costs, interest rates, fund raising, legal services and out-of-area travel. These disallowances were disputed by SCAN and the final settlement was not completed by June of 1987.
- [2] In general, the two Seniors Plus partners agreed to a 50-50% division of the initial risk. An added provision was developed in the partnership agreement, however, to protect Ebenezer Society from large losses due to adverse selection. This agreement was to compare the health status of those enrolled to the estimated status, and make adjustments in the share of risk for large deviations at the end of the initial first year, although this agreement was never implemented.

Seniors Plus established a risk-stabilization fund and a reserve-for-contingencies fund. Seniors Plus estimated a reduction in hospital and physician utilization that would reduce overall project costs. It estimated a targeted cost reduction of \$12.42 ppm, which was applied to each enrollee category in relation to its AAPC factor. This resulted in following estimated reserves: \$10.31 for community Medicare only; \$17.51 for community Medicaid; and \$25.59 for institutional enrollees. The funds were to be divided into the risk-stabilization fund and the reserve-for-contingencies fund on a 50-50% basis. If a savings occurred, the funds would be used to increase benefits or lower premiums gradually in future years. The reserve-for-contingencies fund was also to be funded only in the case of surpluses for increased costs related to the increasing age of the members.

Seniors Plus actually established its risk-stabilization/contingency fund at a rate of \$17.80 ppm, but this was later reduced to \$11.14 ppm. The S/HMO claimed this as an expense on its expenditure report and accumulated these funds in a restricted 5.5% money market account. During the same period, it was borrowing money for operating expenses on its line of credit at 11.5%. Beginning in 1986, HCFA approved a move to cash out the restricted fund to a regular cash account so this money could be used for operating expenses rather than borrowing money at 11.5%. Therefore, Seniors Plus no longer claimed this expense in 1986. Seniors Plus borrowed over \$600,000 from the bank which was guaranteed by GHI and Ebenezer during the first 18 months.

- [3] The Minnesota Medicaid agency agreed to pay Seniors Plus for 80% of the inpatient hospital costs exceeding \$30,000 for each individual Medicaid recipient and the S/HMO was responsible for the remaining 20% of costs. Beyond this level, the state, the S/HMO, and HCFA were to jointly share any excess costs or savings for all members enrolled in the project,

based on the proportion of the revenues actually paid to the HMO through Medicare, Medicaid, and private premium dollars. During the first 18 months, the initial risk corridor was \$1,059,322.

- [4] New York law required that Elderplan maintain adequate reserves to manage retroactive fluctuations in plan service utilization, adverse fluctuations in utilization, and financial loss due to other adverse circumstances. HCFA allowed a reserve of \$6.28 per member per month. Of this total, \$1.50 was to be allocated to meet the New York State requirements and to be used only in the case of Elderplan's insolvency. The remaining \$4.78 pmpm would be used to offset cost overruns during the first year prior to the risk-sharing by HCFA and the state. The arrangements for the second year were the same as the first, except that the savings accrued in the reserve fund from the first year could be carried over for use in the second.
- [5] California Medicaid charged SHP a fee for the costs of covering individuals for expenditures beyond \$15,000. Since no individual reached that level during the first year, SCAN asked and received an elimination of this provision and an increase in its payment rate during the second year.
- [6] Two factors were used to calculate the Medicare Plus II adjusted community rate (ACR) for acute and ambulatory care services. One was a volume adjustor, which was derived from a comparison of current year projects including the hospital days, medical services, home health, and hospice volume. Second, an intensity (time/complexity) factor was used. For hospitals, this was developed on the basis of the average diagnosis-related group weight divided by the average length of hospital stay to obtain the average weight per day for the total Kaiser population and the Medicare Plus II population. By subtracting the total Kaiser average weight per day from the Medicare Plus II average, an intensity factor was developed for Medicare Plus II. For physician visits, the forecast was based on the expected number of visits times the RVU values for the over-65 population in comparison to the Kaiser population using average data from a sample of Kaiser members between 1980-82. In addition, a welfare rate was estimated based on past utilization experience.
- [7] Medicare Plus II rates for basic Medicare services for non-welfare were \$211 in 1985. In 1986, its rate for expanded care services was \$13.73 pmpm, but Medicare Plus II estimated expanded care services would be \$30 pmpm in 1987, because it claimed its monthly costs for chronic and expanded care rose from \$8.74 pmpm in April 1985 to \$9.14 pmpm in January 1986 and to \$19.92 in August 1986 (therefore, doubled during the 18-month period). The costs were thus projected to increase at the same rate over the next 12-month period. Medicare Plus II argued it was necessary to increase the Medicare rates because it would not be bringing new, younger members into the S/HMO during the period to spread the risk. The population enrolled in the S/HMO would age and use a higher rate of

expanded care services. Kaiser held its premium rate constant (at \$49 pmpm) for the three years of the demonstration and did not wish to increase its rate. Therefore, Kaiser estimated that its \$30 pmpm would not be adequate to cover the cost of services, and that funds from the benefit stabilization fund (BSF) from first-year savings would be needed to augment the HCFA payment rates for the last year of the demonstration.

- [8] For example, the KP membership services department had 10 staff members and a coordinator devoted to its total membership. Medicare Plus II was only billed for 50% of an assistant and 75% of a special services representative even though the initial time spent on the members was reportedly greater. The Medicare coordinator only charged one-eighth of her time to Medicare Plus II but estimated spending more than 50% time on the program in 1986.
- [9] Using this approach, the Kaiser expanded care revenue for 1985 was determined by HCFA auditors to be \$490,337. Using the actual records on expanded care expenses, the total expenses for 1985 were \$474,184, showing a net income of \$16,153, which was significantly lower than that reported by Kaiser in its budget reports.
- [10] Physician service costs were based on the ratio of Seniors Plus physician encounters times the total GHI pool of physician costs, including salaries, fringes, and malpractice insurance. The number of physician encounters for Seniors Plus was increased by 20% (previously 11%) to account for the weighting for elderly patients to reflect differences in complexity and time required to furnish services. Clinic services were allocated in the same manner as physician services except the encounters were increased (weighted) by 20%. The costs included all administrative costs of the 13 GHI clinics including occupancy and nonphysician staff salaries and fringes. Support services, including all laboratory, x-ray, pharmacy, and other services, increased by 20%. Provider services included all costs of capitated provider service contracts times the ratio of S/HMO to total member subtracting out unrelated costs such as pediatrics and sports medicine. HCFA recommended eliminating the 20% increase in support services and documenting the nonpersonnel costs in clinic services.
- [11] The total Elderplan disallowances from the HCFA audit of the first 10 months of operation were \$159,984 from total net loss of \$2,050,538 in 1985. MJGC had loaned GMA \$266,471 and MJGC loaned Elderplan \$1,238,677. And in turn, Elderplan loaned GMA \$81,672, according to the 1985 HCFA audit. The total disallowed interest was \$79,195 for loans from MJGC and Elderplan to GMA and Elderplan. A total adjustment of \$10,877 was made by HCFA on the amount allowed for payment to MJGC nursing homes. The nursing homes had billed for \$130 and \$165 per day in the two facilities when actual costs were reported at \$127 per day, and payment for days of care paid for but not actually used were disallowed. In addition, \$17,400 out of \$84,998 in rent costs paid to MJGC was disallowed because amortization of the lease had to extend over

the life of the improvement. Another \$1,577 in depreciation costs was reclassified as start-up costs. In addition, \$62,781 in contingency expense was not allowed to be carried into the second year and therefore had to be capitalized as deferred expense. Elderplan had the HCFA audit reviewed by its accountants Loeb & Troper and challenged a number of the HCFA findings in the fall of 1986. In June 1987, these issues had not yet been resolved.

- [12] HCFA on its 1985 audit found that SHP had paid a total of \$155,000 to SCAN, but its actual costs were only \$87,000 for a difference of \$67,000, primarily because SCAN had billed SHP for personnel positions that were vacant during the period and had overstated the actual salaries and fringe benefits paid. The indirect charges to SHP by SCAN for other salaries, consulting fees, facilities operations, equipment, and petty cash were not found to be related and were disallowed by HCFA. The management agreement for 1987 reduced SHP costs to approximately \$11,000 per month. In 1985, SCAN developed a management services contract with SHP for SCAN to provide the services of a president and chief executive officer, a finance director, and administrative support services, including an administrative assistant, executive secretary, receptionists, and facilities coordinator. The contract also allowed indirect services at a flat monthly fee specified by SCAN with a monthly reconciliation of actual costs and the difference in excess of 10% billed or refunded to SHP by SCAN.

HCFA and the state also found that SCAN was billing SHP in excess of \$7,500 for building depreciation on the building owned by SCAN. As a result of the HCFA audit, SHP also had to repay \$80,000 that had been withheld from HCFA funds for reserve contingencies. The total SCAN 1985 audit finding was that \$217,000 should be repaid to HCFA.

- [13] The AAPOC is developed on the basis of four underwriting factors: age, gender, welfare status, and institutional status. The modification of the factors was calculated by Brandeis using the 1977 Current Medicare Survey data (Leutz et al., 1985). The AAPOC uses census data for age, gender, and the number in institutions and Medicaid data for welfare status.

BIBLIOGRAPHY

- Clark, W. D. (1986, October 1). Risk Sharing in the Social Health Maintenance Organization: The First Year Experience. Paper Presented at the Americal Public Health Association Meeting, Las Vegas, NV.
- Federal Register (1985, January 10). Medicare Program: Payment to Health Maintenance Organizations and Competitive Medical Plans; Final Rule with Comment Period (42 CFR Parts 405 and 417). Federal Register, 50(7), 1314-1418.
- Galblum, T. W., and S. Trieger. (1982). Demonstrations of Alternative Delivery Systems under Medicare and Medicaid. Health Care Financing Review, 3(3), 1-11.
- Goran, M. J. (1981). Who Is Investing in HMOs? In Finance and Marketing in the Nation's Group Practice HMOs (Proceedings of the Annual Group Health Institute). Washington, DC: The Group Health Association, pp. 36-40.
- Harrington, C., R. J. Newcomer, and T. Moore. (In press). HMO Medicare Risk Contract Enrollment Success: An Overview of Contributing Factors. Inquiry.
- Iglehart, J. (1985). Medicare Turns to HMOs. New England Journal of Medicine, 312, 132-136.
- InterStudy. (1986). National HMO Census, 1985. Excelsior, MN: InterStudy Center for Aging and Long-Term Care.
- Iversen, L. H., C. L. Polich, J. R. Dahl, and L. J. Secord. (1986). Improving Health and Long-Term Care for the Elderly: An Examination of Medicare Capitation and HMOs. Excelsior, MN: InterStudy Center for Aging and Long-Term Care.
- Iversen, L. H., and C. L. Polich. (1985a). The Future of Medicare and HMOs. Excelsior, MN: InterStudy Center for Aging and Long-Term Care.
- Iversen, L. H., C. L. Polich, and J. R. Dahl. (1985b). The 1985 Medicare and HMOs Data Book. Excelsior, MN: InterStudy Center for Aging and Long-Term Care.
- Lamb, H. B., and Associates. (1980). A Study of the Factors Influencing the Failure or Need for Rehabilitation of Six Health Maintenance Organizations. Washington, DC: Office of the Assistant Secretary of Health and Office of Health Maintenance Organizations, U.S. Department of Health and Human Services.
- Langwell, K., L. F. Rossiter, J. P. Hadley, S. Nelson, L. Nelson, A. Tucker, and K. Berman. (1986). National Evaluation of the Medicare Competition

- Demonstrations. Washington, DC: Mathematica Policy Research.
- Leutz, W. N., J. N. Greenberg, R. Abrahams, J. Prottas, L. M. Diamond, and L. Gruenberg. (1985). Changing Health Care for an Aging Society: Planning for the Social Health Maintenance Organization. Lexington, MA: Lexington/Heath.
- [Lewin and Associates, Inc.] Fox, P. D., L. Heinen, and R. J. Steele. (1986). Determinants of HMO Success (Contract No. BHMORD-240-83-0095). Washington, DC: Office of Health Maintenance Organizations, U.S. Public Health Service.
- Luft, H. S. (1980). Assessing the Evidence on Health Maintenance Organization Performance. Milbank Memorial Fund Quarterly/ Health and Society, 58(4), 501-536.
- Luft, H. S., S. C. Maerki, and J. B. Trauner. (1986). The Competitive Effects of Health Maintenance Organizations: Another Look at the Evidence from Hawaii, Rochester, and Minneapolis/St. Paul. Journal of Health Politics, Policy and Law, 10(4), 625-657.
- Morrisey, M. A., G. Gibson, and C. S. Ashby. (1983). Hospitals and Health Maintenance Organizations: An Analysis of the Minneapolis-St. Paul Experience. Health Care Financing Review, 4(3), 59-69.
- Office of Prepaid Health Care (OPHC). (1987). Statistical Data for the Type B Federally Qualified HMO Population of the United States: Statistical Year 1986 (Unpublished report). Washington, DC: OPHC, U.S. Department of Health and Human Services.
- Omnibus Budget Reconciliation Act (OBRA) of 1986. U.S. PL 99-509.
- Slabosky, A. (1981). Report of the Consolidated Technical Assistance Project. In Finance and Marketing in the Nation's Group Practice HMOs (Proceedings of the Annual Group Health Institute). Washington, DC: The Group Health Association, pp. 241-251.
- Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982. U.S. PL 97-248.
- Titus, S. L. (1982). Barriers to the Health Maintenance Organization for the Over 65's. Social Science and Medicine, 16, 1767-1774.
- U.S. General Accounting Office (GAO). (1986). Medicare: Issues Raised By Florida Health Maintenance Organization Demonstrations (GAO/HRD-86-97). Washington, DC: Comptroller General of the United States.

CHS LIBRARY



3 8095 00012458 2